



- Né le 25.07.1962, Toronto, Canada
- Directeur de Recherche DRCE1, CNRS Chimie, Section 13
- CP2M UMR 5128, Batiment CPE-Lyon, 43 Blvd du 11 Nov 1918, BP 2077, Villeurbanne, France
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## Professional Experience

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- 2021-present** *Directeur*, CP2M/CNRS UMR 5128, Villeurbanne, France
- 2014-present** *Directeur de Recherche DR1*, C2P2/CNRS UMR 5265, Villeurbanne, France
- Responsible for Polymer Reaction Engineering programme
- 2013-2020** *Directeur*, C2P2/CNRS UMR 5265, Villeurbanne, France
- 2011-2013** *Directeur de Recherche DR2*, C2P2/CNRS UMR 5265, Villeurbanne, France
- Responsible for Polymer Reaction Engineering programme
  - Scientific coordinator for Chemistry and Processes of Polymerisation group
- 2007-2011** *Professor and CRC Tier-1 Research Chair* in Polymer Reaction Engineering
- 2002-2007** *Directeur de Recherche DR2*, LCPP UMR 140/C2P2 UMR 5265, Villeurbanne,
- Responsible for Polymer Reaction Engineering programme
- 1997-Present** *Professor, ESCPE-Lyon*
- Assigned to LCPP UMR 140 (precursor to C2P2 UMR 5265)  
Responsible for the "Polymer Reaction Engineering" teaching (ESCPE) and research (LCPP)
- 1993-1997** *Associate Researcher*, CNRS UMR 140, Villeurbanne, France
- Creation of Polymer Reaction Engineering Group
- 1989-1992** *Research Engineer*, ELF-Aquitaine /ATOCHEM, Mont & Nancy, France
- Modelling of olefin polymerisation processes.

## Education

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- 1997** Habilitation à diriger des recherches (HDR) Université Claude Bernard Lyon1
- Title: "Génie des procédés de polymérisation"
- 1985-1990** Ph.D. (Chemical Engineering), University of Massachusetts, Amherst MA, USA
- Title: "The Conceptual Design of Polymerisation Processes" – Creation of an expert system for polymer process design.
- 1980-1985** B.Eng. (Chemical Engineering), McMaster University, Hamilton ON, Canada

## Scientific Production and Supervisory Work (Summary)

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Publications (Peer review): 286

Patents: 6

Book Chapters: 12

Books (authored): 1

Key Note Lectures : 45

Seminars and invited conferences: 65

Oral Presentations (Submitted abstracts): 122

Poster Presentations: 197

MSc (or eq.): 45

PhD (co-) supervised: 53 finished + 3 current

PDF supervised: 19

## Research Interests and Vision

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My research program is in the field of Polymer Reaction Engineering. As such the focus of my research is on the understanding of the intricate link between the chemistry of a reaction, the properties of the polymer and reactor(s) in which the products are made. This approach to studying the processes of polymerization that includes both chemistry and chemical engineering allows me to attack a wide range of problems, going from very fundamental science to highly applied engineering.

The basis of reaction engineering is to provide answers to questions such as: what controls a chemical reaction? Is it the chemistry, the rate of mass transfer, the quality of mixing, or all of the above? How much of a given monomer is needed in a mixture to obtain desirable materials? What tools can we design or use to understand the fundamental science needed to provide concrete answers for concrete applications? However, the production of polymers is different from most other chemical production processes in the sense that the structure, properties and value of polymer-based materials are determined in part by the “chemistry” and in part by the “process” used to make them – they are “products” by “process” to cite the popular phrase.

My work covers two very general areas of activity: (1) free radical polymerisation in aqueous media – essentially emulsion polymerisation in different forms; and (2) the polymerisation of olefins on supported catalysts. Because the reaction conditions and fundamental chemistries used to make these 2 types of materials, there can be significant differences in the way we look at each domain. However, regardless of whether we are considering an emulsion polymerisation or a catalysed olefin polymerisation, the particles themselves are where the reaction occurs (for the most part). Therefore, understanding how they are created, how they evolve and what happens to them during the reaction is essential. They are often formed quite rapidly, and their size and properties will be influenced to a great extent by the type and number of active centres that are used to form the macromolecules of which the particles are made. Interactions between particles themselves can influence local conditions in the reactor, which in turn can have an impact on how the reactor itself behaves.

## Conference Organisation and Other Service

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### Chair and/or Principal Organiser

- INCOREP (International Conference on the Reaction Engineering of Polyolefins) Conference Series  
Founder and Organiser of the Conference Series:
  - Lyon France in 2000, 2003, 2005
  - Montreal, PQ, Canada, 2008
  - Ferrara, Italy 2013,
  - Geleen, Netherlands, 2017
  - BLUESKY-INCOREP combined Conference, Sorrento, Italy, 2023
- Polymer Reaction Engineering X, Scottsdale AZ, 11-15 Dec 2022, Conference Chair  
European Conference on Chemical Engineering, Nice, France, 2015, Topic Manager – Polymer Reaction Engineering
- Polymers in Dispersed Media, Lyon, Chair and Co-organiser, 2012, 2004
- Recontres du Centre Jacques Cartier
  - Fibres et revêtements avancés : du bécher au procédé, Montréal, QC, Canada, 2017. Co-Chair and Organiser
  - Changing TRL, Changing Scale in the Polymer Industry, Lyon, France, 2016, Co-Chair and Organiser
  - Emulsification, Modeling, Technologies and Applications, Lyon 2012, Scientific committee
  - Properties, Monitoring and Control of Polymerisation Reactors, Lyon, France 2007, Co-Chairman
  - Modelling, Optimisation & Control of Polymer Reactors, Lyon 2003, Co-Chairman
  - Polymer Reaction Engineering On-line, Lyon, France 1998n Chair and Organiser.
- World Congress on Chemical Engineering WCCE 8, 23-27 August, 2009, Montreal, Canada: Chair of the Symposium on Advanced Polymer Composites and Hybrids

## Timothy F.L. McKenna

- 40TH IUPAC International Symposium on Macromolecules MACRO 2004, Paris, July 4–9, 2004. Co-chair (with Prof. W. Reed, Tulane U., New Orleans, LA) of the symposium Polymerization processes, control and monitoring.
- 3rd World Congress on Emulsions, 24–27 September 2002, Lyon, France, Chair of symposium “Emulsions in polymer production”

### Scientific/Organising Committees

- 2022, 7<sup>th</sup> International Conference on Population Balance Modeling (Scientific Committee), Lyon, France, 9-11 May
- 2015, European Conference on Chemical Engineering (Scientific Committee), Nice, France
- Congrès Francophone du Génie des Procédés (Scientific Committee): 2014, Agadir, Morocco; 2016, Safi, Morocco.
- 2013, Congrès de la Société Française du Génie des Procédés (Organising, Scientific Committees), Lyon, France
- 2008, 2014 POLYMER COLLOIDS: FROM DESIGN TO BIOMEDICAL AND INDUSTRIAL APPLICATIONS, Prague, Czech Republic.
- 2006,: POLYMER REACTION ENGINEERING VI, (Technical Chairman, “Process Monitoring and Control / On-Line Sensors”) Halifax, Nova Scotia, Canada
- 2006, : FLUID MIXING 8 London, England
- 2003, Québec, QC, Canada: POLYMER REACTION ENGINEERING V

### Other Service

- Séminaire Valorisation – SRH, Presentation on Valorisation of Research, Laboratory visits for the staff in Human Resources of the Regional Delegation of the CNRS DR07, 3 May, 2022
- Chairman of the “WORKING PARTY ON POLYMER REACTION ENGINEERING” of the European Federation of Chemical Engineering (EFCE), 2006-2012

### Awards

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- **2020-22 Prime d'Encadrement Doctoral et de Recherche**, CNRS
- **2013-15 Prime d'excellence scientifique**, CNRS
- **2007 Tier 1 Canada Research Chair**, Canada Research Chairs Programme – Government of Canada
- **2007 Ontario Research Fund**, Ministry of Research and Innovation of Ontario:

### Expertise/Project Evaluation

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- **Stanford Linear Accelerator**, 2020 : Review of proposal for use of Stanford Synchrotron Radiation Lightsource
- **Fonds Québécois de la recherche sur la nature et les technologies**, Evaluation of research proposals for NanoQuebec :
  - 2014: Président du Comité d'experts- Évaluation infrastructure en nanotechnologies
  - 2012: Président du comité thématique 803D – Chimie matériaux
  - 2011: Membre du Comité d'experts- Évaluation infrastructure en nanotechnologies
  - 2010: Président du comité sur les nanotechnologies du bois
  - 2009: Membre du comité d'évaluation
- **Agence d'évaluation de la recherche et l'enseignement supérieur** 2011, Member of evaluation committee
- **ATLANTIC CANADA OPPORTUNITIES AGENCY**, 2010, External evaluator for research proposals
- **KING FAHD UNIVERSITY OF PETROLEUM & MINERALS (KFUPM)**, Dhahran, Saudi Arabia, 2009-2011: Evaluation of scientific projects and requests for funding
- **Agence National de la Recherche (FR)** , 2009, 2010: Evaluation of requests for funding
- **Ministry of Research and Innovation, Government of Ontario**, 2009, 2010: Early Research Awards

- **Région Lorraine**
  - 2007-2010: Expert evaluator for Pôle : "MATERIAUX, ENERGIE, PROCEDES, PRODUITS"
  - 2006: Evaluation of Contrat Plan d'Etudes Régional
- **Commission Européenne**
  - 2008: Expert for LARGE (7th Framework Program)
  - 2007: Expert for SMALL (7th Framework Program)
- **IKERBASQUE: Basque Foundation for Science**, 2008: Evaluation of dossiers of candidates for research positions at Ikerbasque
- **Natural Science and Engineering Research Council**
  - 2015: Canada Research Chair program
  - 2003: Evaluation strategic research project proposals
- **Swiss national science foundation**, 2013, 2003: Evaluation research proposals
- **The Research Council of Norway**, 2002: Evaluation for program "Knowledge-building projects with user involvement"

## Expert Witness

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- Finnegan, Henderson, Farabow, Garrett & Dunne (Washington D.C.), Patent Validity, 2013-14
- Hogan Lovells International LLP (Amsterdam), Trade secrets litigation, 2016
- Finnegan, Henderson, Farabow, Garrett & Dunne (London, UK.), Patent Validity, 2018-19

## Consulting

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- |                                  |                                 |
|----------------------------------|---------------------------------|
| • Braskem (USA, BR)              | • Sherwin Williams (USA)        |
| • CP Chem (USA)                  | • INEOS/BP CHEMICALS (FR/UK)    |
| • Daeilim Chemicals (SK)         | • ECOPETROL (CO)                |
| • ATOCHEM/ARKEMA (FR)            | • MITSUBISHI CHEMICALS (JP)     |
| • Total Petrochemicals (BE, USA) | • BASF (DE)                     |
| • ExxonMobil Chemicals (USA)     | • BASF (USA) - Catalysis        |
| • D.S.M. (NL)                    | • TARGOR (DE)                   |
| • Sabic (NL, KSA, USA)           | • DuPONT Canada (CA)            |
| • Sharq (KSA)                    | • Integrated Lab Solutions (DE) |
| • Borealis (NO)                  | • PPT Chemicals (TH)            |

## Editorial Work

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- **Associate Editor, 2009 – 2015**  
Canadian Journal of Chemical Engineering
- **International Advisory Board**,  
Canadian Journal of Chemical Engineering, 2016 – present  
Polyolefin Journal, 2012 – present  
Chemical Ing. Tech., (Wiley-VCH Verlag GmbH) 2011- 2016  
Macromolecular Materials & Engineering (Wiley-VCH Verlag GmbH) 2005 – present  
Macromolecular Reaction Engineering (Wiley-VCH Verlag GmbH) 2006 – present  
Industrial & Engineering Chemistry Research (ACS) 2005-2007
- **Editorial Board**  
Polymer Reaction Engineering (Marcel Dekker, N.Y.) 2001-03.  
ChemBioEng Reviews (Wiley-VCH Verlag GmbH), 2014-
- **Guest Editor**  
Macromolecular Symposia, Volume 285, 2009  
Polymer, Special issue on Polymers in Dispersed Media, 2005  
Chemical Engineering Science, Special Issue ECOREP Conference, 2001

## Review Work

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- ACS Macroletters
- AIChE J
- Canadian J of Chemical Eng
- Chemical Engineering J
- Chemical Engineering Processing
- Chemical Engineering Science
- Chemical Engineering & Technology
- Colloid and Polymer Science
- Colloids Surfaces A: Physicochemical and Engineering Aspects
- European Polymer Journal
- Ind. & Engineering Chemistry Research
- J Applied Polymer Science
- J Catalysis Part A
- J Coatings Technology
- J Colloid and Interface Science
- J Plastic Film & Sheeting
- J Polymer Science Part A: Polym. Chem Langmuir
- Macromolecular Reaction Engineering
- Macromolecular Chemistry and Physics
- Macromolecular Materials and Engineering
- Macromolecular Rapid Communications
- Macromolecular Symposia
- Macromolecular Theory and Simulations
- Macromolecules
- Polymer
- Polymer Bulletin
- Polymer International
- Polymer J
- Polymer Reaction Engineering
- Polymers for Advanced Technology
- Polyolefins Journal
- Rheology
- Techniques de l'Ingenieur

## Teaching and Short Courses

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### *Graduate level courses*

#### *IFP School/ENSPM* – Rueil Malmaison, France

- Chemical Engineering Aspects of Polymerization, Masters Course, 1994-present, 18 hours/year
- Olefin Polymerization, Masters Course, 2010-present, 14 hours/year

#### *Queen's University* – Kingston, ON, Canada

- CHEE 807 - Advanced Topics in Chemical Engineering: From Petrochemicals to Plastics, 2009, 36 hours
- CHEE 807 - Advanced Topics in Chemical Engineering: Polymer Process Design, 2008, 18 hours
- CHEE 903 - Polymerisation in Dispersed Media, 2009-2010, 18 hours
- CHEE 904 - Olefin Polymerisation Processes, 2010, 18 hours

#### *Université Claude Bernard Lyon-I* - Villeurbanne, France

- Génie de la polymérisation (DEA), 1996-2004, 15-30 hours/year

### *Undergraduate courses*

#### *Queen's University* – Kingston, ON, Canada

- CHEE 330 - Heat and Mass Transfer, 2010, 36 hours/year
- CHEE 317 - Mass Transfer and Mass Transfer Unit Operations, 2009-2010, 36 hours/year

#### *ESCPÉ-Lyon*

- Génie de la polymérisation (Année 4), 1996-2025, 14-28 hours/year
- Génie de la polymérisation industrielle (Année 3), 2023-present, 14-24 hours/year

## Intensive short courses for professionals

### *Independent In-house (private) Courses*

- 2025.12.10 Free Radical Polymerization in Divided Media, KEMONE, St Fons, FR
- 2022.06.02 Condensed mode cooling for gas phase reactors, Daelim Chemicals, South Korea, (On-line).
- 2011.11.16-17 Polyolefin Reaction Engineering, Borealis, Linz, Austria
- 2007.12.05-07 Procédés de Polymérisation et Applications, ARKEMA, Lacq, France
- 2006.11.20-22 Procédés de Polymérisation, ARKEMA, Lacq, France.
- 2005. Polymer Reaction Engineering. Formation Continue CPE-Lyon
- 2003.05.27-28 Polyolefin Reaction Engineering. OSPT Short Course, Twente University, Enschede, NL

2002. Polymer Reaction Engineering. Formation Continue CPE-Lyon  
2001.07.20-21 Polyolefin Reaction Engineering. OSPT Short Course, Twente University, Enschede, NL

***Polyolefin Reaction Engineering (In-House Private Courses with Prof. J.B.P. Soares)***

2025.05.06-13 SABIC, Al Jubail, KSA  
2024.05.06-08 SABIC, Geleen, NL  
2024.03.04-07 ExxonMobil Chemicals, Baytown, TX, USA.  
2023.02.06-08 SABIC USA, Sugarland TX, USA.  
2022.10.03-07 PTT GC, Rayong, Thailand.  
2022.06.02-04 Repsol, Sines Portugal.  
2022.03.07-09 Braskem (International on-line course.)  
2017.10.02-04 SABIC, Geleen, NL  
2017.09.17 Total USA, La Porte, TX, USA  
2016.04.14-15 Total USA, La Porte, TX, USA  
2013.11.11-13 SABIC/Lanxess/DSM, Geleen, NL  
2013.05.25-28 SABIC SRT, Riyadh, Kingdom of Saudi Arabia  
2011.12.28-30 ECOPETROL, Piedecuestra, Columbia  
2011.05.18-20 SABIC/Lanxess/DSM, Elsloo, LN  
2008.12.13-17 Al-Jubail Industrial City, Kingdom of Saudi Arabia.

***Polyolefin Reaction Engineering (Public Courses with Prof. J.B.P. Soares)***

2022.04.04-07 Lyon, France.  
2019.10.28-30 Houston, TX, USA  
2017.09.20-22 Houston, TX, USA  
2016.04.11-13 Houston, TX, USA  
2013.11.18-21 Houston, TX, USA  
2012.05.28-30 Dubai, UAE

***Polyolefin Reaction Engineering (Public Courses with Prof. J.B.P. Soares and other colleagues)***

2018.11.19-22 Lyon, France (with JBP Soares, Ch. Boisson, V. Montiel, P. Deslauriers)  
2015.05.18-21 Lyon, France (with JBP Soares, Ch. Boisson)  
2011.05.23-27 Lyon, France (with Profs. JBP Soares and LC Simon)  
2010.04.12-16 Houston, Texas, USA (with Profs. JBP Soares and LC Simon)  
2008.04.19-23 Dubai, UAE (with Profs. JBP Soares and LC Simon)  
2006.11.15-17 Lyon, France (with Profs. J Soares and LC Simon)  
2006.07.10-15 Porto Alegre, Brazil (with Profs. J Soares and LC Simon)  
2005.06.17-19 Lyon, France (with Profs. J Soares, L Simon, C. Kiparissides,)

## Appendix 1. Funding Sources

### Public Sector Projects

#### 1. ANR – Agence Nationale de Recherche (France)

2018-2022 – CleanPoly: Elimination of fouling and coagulum in polymerisation reactors

- Role: Project Leader (with LAGEP – UCB, Arkema, Kemone) ANR Funding 583 722 €

2016-2020 – Thermpoly: Experimental and modeling study of ethylene polymerization in gas phase reactors: impact of thermodynamics

- Role: Project Partner (with ETH Zurich, LAGEP – UCB), ANR Funding 265,477 €

2016-2019 – Photo-B: Développement de nouveaux systèmes photoamorceurs borés pour une photopolymérisation durable

- Role: Project partner

2016-2019 – LISIP : Laboratory for Innovation, Scale-Up and intensification of Polymerisation. Projet LabCom with Activation, S.A.

- Role: Project partner

2013-2017 – SCALE-UP: Innovative approaches to process scale-up and scale-down for latex production

- Role: Project leader, ANR Funding 874 630 €

2007-2011 – REACT-OP: Reactors, Reactions and Structures in Olefin Polymerisation: A novel investigation of the world's most important polymers

- Role: Project partner

#### 2. Région Auvergne Rhône Alpes

2020-2024 – IFLEM : Innovations en Fluoropolymères pour l'Énergie et les Matériaux

- Role : Project leader

#### 3. Dutch Polymer Institute

2025-2029 – SLUGGER: Systematic Comparison of Slurry and Gas-Phase Reactors: An Integrated Experimental and Modelling Approach

- Role: Project leader

2018-2022 – *Disentangled*: Control of crystallisation, chain entanglement and rheology via process conditions

- Role: Project leader

2016-2018 – *G4P*: Gas Phase Propylene (Pre)Polymerisation: Impact of catalyst activation, prepolymerisation and support morphology on polypropylene production

- Role: Project leader

2013-2017 – *HIPSTER*: High Impact Polypropene: Structure Evolution and impact on Reaction

- Role: Project leader, coinvestigator with V. MONTEIL (C2P2)

2012-2016 – *GEOCAT* : Investigation of the impact of the geometry of catalyst supports on olefin polymerisation

- Role: Project leader, coinvestigator with V. MONTEIL (C2P2)

2009-2013 – *IMPOR* : Improved Models for Polyolefin Reactors

- Role: Project leader, coinvestigator with Professor J. Kuipers (TU Eindhoven)

2008-2012 – *SITE COUNT*: Measuring active site concentration of olefin polymerization catalysts

- Role: Project leader, coinvestigator with Dr. C. BOISSON (C2P2), Professor V. Busico, (U. Naples)

2008-2011 – *START-UP*: The study of the role of the support, support preparation and initial conditions on olefin polymerisation

- Role: Project leader, coinvestigator with V. MONTEIL (C2P2)

#### 4. Canada

2010-2012 – MITACS Accelerate : Innovative coagulator design for the production of advanced composite materials

- Role: Principle Investigator

2009-2011 – Ministère de la recherche et Innovation de l'Ontario fonds post doctoraux

2009 – Conseil de recherches en sciences naturelles et en génie du Canada, Infrastructure et Outis de recherche

- Role: Principle Investigator

2007-2011 – Canada Research Chair - Tier 1

- Role: Chair Holder

2007-2011 – NSERC Discovery grant

- Role: Principle Investigator

2007 – Canadian Foundation for Innovation: Infrastructure grant

- Role: Principle Investigator

2007 – Queen's University : Start-up grant

- Role: Principle Investigator

2007 – Ministry of Research and Innovation of Ontario: Ontario Research Fund

- Role: Principle Investigator

## 5. **European Commission**

2005-2007 - Integrated Project (FP6) 2005-2009. NAPOLEON: Nanostructured Waterborne Polymer Films with Outstanding Properties.

- Role: Project partner and investigator

2001-2005 – Cost-Shared Research and Technical Development (FP5): "POLYPROP - Polyolefins: Improved Properties, reactor Control and Operability

- Role: Project coordinator and coinvestigator

1997-2000 – BRITE-EURAM (FP4): "CATAPOL : The Reaction Engineering of Heterogeneously Catalysed Polymerisations".

- Role: Project coordinator and coinvestigator

## 6. **Fonds France-Canada pour la Recherche (Ambassade de France au Canada)**

2004-2005 – University of Waterloo: "Development of Hybrid Polyolefin-clay Nanocomposites"

- Role: Coinvestigator with Prof. J. Soares, Prof L. Simon (U. Waterloo)

2001-2002 – University of Ottawa: "High Quality Latex Dispersions

- Role: Coinvestigator with Prof. M. Dubé (U. Ottawa)

## 7. **France-Brazil**

2001-2003 – CNRS-CNPq: FAENQUIL, Universidad de Lorena, SP: "Latex à Haut Taux de Solide: Production, suivie en ligne et mise au point de tensioactifs réactifs" (1 PhD co-supervised with Prof. J.C.C. Pinto, UFRJ Rio de Janeiro)

- Role: Coinvestigator with Prof. A.M. dos Santos (U. Lorena)

1998-2000 – CAPES-Cofecub: "Capteurs en ligne pour reacteurs de polymerisation" (2 doctorants cosupervisés avec le Brésil)

- Role: Coinvestigator with. Profs. G. FEVOTTE (France) and J.C. Pinto (Brasil)

## **Industrial/Private Sector Financing**

2025 Borealis (Provo, FI)

2023 Manufacture Française des Pneumatiques MICHELIN (Clermont Ferrand, France)

2022 SABIC (Geleen, NL)

2021 Arkema (Colombes, Pierre Bénité, FR)

2019 SABIC (Geleen, NL)

2019 SCG (Bangkok, TH)

2019 Arkema (Serquigny, FR; Colobmes FR)

2018 ExxonMobil Chemicals (Baytown, TX, USA)

2017 European Organic Coatings (Brussels, BE)  
2017, 2018 Asahi Glass Company (Tokyo, Japan)  
2016 INEOS (Lavera, France)  
2016 Arkema (Serquigny, France)  
2016 SNF Floerger (Andrézieux, France)  
2016 Manufacture Française des Pneumatiques MICHELIN (Clermont Ferrand, France)  
2016 Braskem (Trionfo, RS, Brazil)  
2014 Toray Plastics Europe (Saint-Maurice-de-Beynost, France)  
2013 Sherwin Willimas Company (Cleveland, OH, USA)  
2012 Toray Plastics Europe (Saint-Maurice-de-Beynost, France)  
2011 Kaplan Energies (Pierre Bénite, France)  
2010 SABIC KSA (Ryadh, Kingdom of Saudi Arabia) : Role of support properties on metallocene performance  
2009 DuPont Canada (Kingston, ON, Canada) : Structured Latexes  
2008 BASF (Ludwigshafen, DE) : High solid content latexes  
2007 Larfage (St Quentin Falavier, France) : Additives for concrete and plaster  
2007 Arkema (Lacq, France) : Modelling of MMA cast sheet polymerisation  
2006 Toray Plastics Europe (Saint-Maurice-de-Beynost, France) : Adhesives for PET films  
2005 ATOFINA (Lacq, France) : High solid content acrylic latexes  
2005 Xerox Research Centre of Canada (Mississauga, CA) : Emulsification for polymerisable dispersions  
2003 TOTALFINA (Feluy, BE) : Polymerisation of olefins on supported catalysts  
2003 CRAY VALLEY (Villers St Paul, France) : Bimodal latex for paint binders  
2003 INEOS(Lavera, France) : Nascent polymerisation of olefins  
2003 SOLVIN (Tavaux, France) : High Solid Content PVDC latex  
2002 ATOFINA (Pierre Bénite, France) : Emulsion polymerisation of vinyl chloride  
2002 ATOFINA (Lacq, France): calorimetry for pilot plant reactor control  
2001 Japan Polychem (Mitsushima, JP) : High impact polypropylene copolymers  
1999 ATOCHEM (Serquigny, France) : Modelling of High solid content acrylic latexes  
1997 ATOCHEM (Serquigny, France) : High solid content acrylic latexes

## Appendix 2. Peer-reviewed publications cited in the ISI Web of Knowledge

### *In Preparation*

### *Submitted*

N. Sheibat-Othman, E.K. Gelinski, I.S. Monteiro, A.C. Mendez Ecoscia, T.F.L. McKenna, "Assessment of the Stability of Latex Particles," (2025 11 25 Submitted IECR)

### *Appeared/Accepted*

#### **2026**

286. A.P. Alves Amorim, N. Sheibat-Othman, R. Lopes do Rosario, J.B.P. Soares, T.F.L. McKenna, "Impact of Internal Particle Morphology During Gas Phase Ethylene Polymerization: A New Particle Model Approach," *Ind. Eng. Chem. Res.* (To appear)
285. T. Lys, T.F.L. McKenna, "Exploratory study on the production of bimodal microsuspension PVC products in a one pot process," *Macromol. React. Eng.*, 2026; 0:e70011, DOI 10.1002/mren.70011

#### **2025**

284. M. Nolasco Araujo, T. Boucheres, N. Sheibat-Othman, T.F.L. McKenna, "Gas-liquid mass transfer in unbaffled multi-impeller stirred tank reactors for vinylidene fluoride emulsion polymerization under supercritical conditions: experimental pressure-based approach and CFD simulations of hydrodynamics," *Ind. Eng. Chem. Res.* 2025, 64, 24538–24550 - *Editors Choice*
283. K. Kulajanpeng, W. Tanthapanichakoon, N. Sheibat-Othman, T.F.L. McKenna, Modelling of a multizone circulating reactor for gas-phase propylene (co)polymerization: from pilot to full scale reactors, *IECR*, 2025, 64 (14), 7264-7282, DOI 10.1021/acs.iecr.4c04558

#### **2024**

282. E.K. Gelinski, M. Torres Aladro, N. Sheibat-Othman, T.F.L. McKenna, Mass Transfer in Emulsion Polymerization: high solids content latex and mixing effects, *MREN*, 2024, 2300064, 10.1002/mren.202300064
281. A. Albeladi, A. Moman, T.F.L. McKenna, "Influence of Cocatalysts on the Performance of Post-Phthalate Supported Ziegler Natta Catalysts in Gas Phase Propylene Polymerization", *IECR*, **63**, 1298, 2024, doi.org/10.1021/acs.iecr.3c03551
280. N.B. Ishola, T.F.L. McKenna, "Machine Learning Techniques for the Prediction of Polymerization Kinetics and Polymer Properties." *C.J.Ch.E.*, 2024;102:2228–2243, DOI:10.1002/cjce.25165
279. Gelinski, N. Sheibat-Othman, T.F.L. McKenna, "Mass transfer in emulsion polymerization involving a gaseous monomer: Review and Modelling," *C.J.Ch.E.* 2024, 102, 532-46, doi 0.1002/cjce.25120

#### **2023**

278. K. Kulajanpeng, Y. Bel Hadj Hassine, N. Sheibat-Othman, W. Tanthapanichakoon, T.F.L. McKenna, "Multicomponent solubility in gas-phase propylene processes," *J. Appl. Polym. Sci.*, 2023, 140, e54695, doi.org/10.1002/app.54695
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## Appendix 4. Conférences, Seminaires et Participation au Congrès

### Plenary Lectures/Key Note addresses/Invited Oral Presentations (Conferences)

#### 2025

45. Challenges Industriels et Défis Académiques Autour des Procédés de Polymérisation, *Villeurbanne, FR, 18 Nov. 2025*, T.F.L. McKenna, Polymerisation Reactors: Reality vs Assumptions of Ideality
44. Canadian Society of Chemical Engineering Conference , *Montreal, PQ, Canada, Oct 05-07, 2025*, M. Nolasco Araujo, T. Boucheres, N. Sheibat-Othman, T.F.L. McKenna, “Modelling of Vinylidene Fluoride Emulsion Polymerization”

#### 2024

43. Canadian Society of Chemical Engineering Conference , *Toronto ON, Canada, Oct 06-09, 2024*, Alves Amorim A.P., Sheibat-Othman N., McKenna T.F.L., Impact of Internal Particle Morphology during gas phase ethylene polymerization: A new particle model approach
42. Advances in Polyolefins, *Rohnert Park CA, USA, Sept 29-Oct 02, 2024*, T.F.L. McKenna, Sorption of Vapor Phase Components: Impact on Properties of PE Made in the Gas Phase

#### 2023

41. Canadian Chemical Engineering Conference, *Calgary, AB, Canada, October 6-9, 2023*, R. Lopes do Rosario, T.F.L. McKenna, “A new gas phase process for Ultrahigh molecular weight polyethylene: crystallization vs chain growth.”
40. Canadian Chemical Engineering Conference, *Calgary, AB, Canada, October 6-9, 2023*, E. Gelinski, M. Torres Aladro, N. Sheibat-Othman, T.F.L. McKenna, “Mass transfer effects in supercritical/liquid emulsion polymerizations – toward high solid content PVDF latexes,”

#### 2022

39. M. Torres Aladro, T.F.L. McKenna, Mass transfer limitations in multiphase emulsion polymerization, European Federation of Chemical Engineering Spotlight Talks (on-line), November 22, 2022

#### 2020

38. SPE Polyolefins, *Houston, TX, U.S.A. 25 February, 2020*, “The Impact of Induced Condensing Agents on Ethylene Polymerization in Gas Phase Reactors: *An Experimental and Modeling Study*,” Amel Ben M’Rad, N. Sheibat-Othman, T.F.L. McKenna

#### 2019

37. Club Emulsion, Sept.30-Oct. 01, Colombes, France, “Particle stability and coagulation - A solved problem?” T.F.L. McKenna, N. Sheibat-Othman, D. Cheng
36. DECHEMA Workshop on Polymer Reaction Engineering, Hamburg, Germany, 11-14 June, 2019, “Condensing agents in ethylene polymerisation: It’s not just the heat!”, Timothy F.L. McKenna
35. SPE Polyolefins, *Houston, TX, U.S.A. 24-27 February, 2019*, “Improved understanding of the impact of alkanes when using condensed mode cooling for PE production, Timothy F.L. McKenna\*, Arash Alizadeh, Rita Alves, Fabiana N. Andrade

#### 2018

34. Polymer Reaction Engineering X, 19-23 May 2018, Punta Cana, DR, “Impact of induced condensing agents on reactor performance for ethylene polymerisation in the gas phase.”

#### 2017

33. Entretiens du Centre Jacques Cartier: Fibres et Revêtements, B. Rezende-Lara, T.F.L. McKenna, K. Ouzineb, Improvement of barrier property by reformulation of acrylic latexes,” 15-17 October, 2017, Montréal, PQ, Canada
32. Canadian Conference on Chemical Engineering, 22-25 October, 2017, “Towards a better understanding of condensed mode cooling.”
31. Advances in Polyolefins, Santa Rosa California, 24-27 Sept 2017, “Towards a better understanding of condensed mode cooling.”
30. Hangzhou International Polymers Forum, Hangzhou, China, 22-25 May, 2017, “Condensed mode cooling for ethylene polymerisation reactors.

#### 2016

29. Lyon-Polymer Science and Engineering Workshop, Lyon, France, 7-8 April, 2016, “An integrated approach to the scale up of emulsion polymerisation”

**2015**

28. World Polyolefin Congress 2015, Tokyo, Japan, 23-27 November 2015, "Impact of condensable compounds on the gas phase polymerisation of ethylene"
27. Advances in Polyolefins, Santa Rosa California, 20-24 Sept 2015, "Impact of Induced Condensing Agents in the Gas Phase Polymerisation of Ethylene"
26. Polymer Reaction Engineering IX, Cancun, MX, 10-15 May, 2015, "Impact of Induced Condensing Agents in the Gas Phase Polymerisation of Ethylene"

**2014**

25. Canadian Conference on Chemical Engineering 2014, Niagara Falls, ON, Canada, 2014, 20-23 October, "Polymer Reaction Engineering: Still alive and kicking".
24. Frontiers of Polymer Colloids: From Synthesis to Macro-Scale and Nano-Scale Applications, Prague 2014, 21-24 July, 2014, Prague, Czech Republic, "A combined CFD-PBM approach to the scale-up of emulsion polymerisation processes"

**2013**

23. Advances in Polyolefins, Santa Rosa California, 13-16 October, "Effect of the inert condensing agent (ICA) during gas phase ethylene polymerisation"

**2012**

22. ChemReactor XX, Luxembourg City, Luxembourg, 3-7 December, 2012, "Olefin Polymerisation Reactors: What kind of problems do we face in olefin polymerisation reactors, and what kind of lab tools can we use to study them?"
21. Chemelot International Polyolefins Symposium 2012, Maastricht, The Netherlands, "Specialised tools for the study of the first instants of catalysed olefin polymerisations. Some conclusions and speculations on what's next."
20. 8th International Workshop on Heterogeneous Ziegler-Natta Catalysis, JAIST, Kanazawa, Japan, Keynote Address, "The study of olefin polymerisation at short times: gas and solution phase studies using specially adapted reactors,"

**2011**

18. 61st CSChE Conference, London, Ontario, Canada, Keynote Address, "The study of olefin polymerisation at short times: Studies using specially adapted reactors."
17. 61st CSChE Conference, London, Ontario, Canada, "Continuous Miniemulsification Using Static Mixers,"
16. International Polymer Colloids Group Conference, Durham, NH, Keynote Address, "Options for Efficient Miniemulsification and Continuous Processes."
15. UK Colloids Forum, London, UK, "Continuous Miniemulsification Using Static Mixers."
14. Advances in Polymer Science and Technology II, Linz, Austria, "The study of olefin polymerisation at short times: Studies using specially adapted reactors."

**2008**

13. 47th Microsymposium of Polymer Colloids: from Design to Biomedical and Industrial Applications, Prague, Czech Republic, "Emulsification for latex production."

**2007**

12. 5th International Workshop on Heterogeneous Ziegler-Natta Catalysis, JAIST, Kanazawa, Japan, "Growth and evolution of particle morphology: an experimental & modelling study."
11. Advances in Polyolefins: 2007, Santa Rosa CA, USA "Particle Growth & Evolution of Morphology: A survey and some open questions."

**2006**

10. World Polymer Congress, 41st International Symposium on Macromolecules (IUPAC MACRO 2006), Rio de Janeiro, Brazil, "High Solid Content Latex Systems."

**2005**

9. CHEMPOR 9, Coimbra, Portugal, Keynote Address, "High Solid Content Latexes: Process development via experiments supported by modelling."

**2004**

8. METCON 4, Houston, Texas, USA, "Toward a Morphological Model of Polyolefin Particle Growth."

7. 40th World Polymer Congress/IUPAC, Paris, France "Use of conductivity measurements to monitor particle formation in emulsions."

**2003**

6. Gordon Research Conference on Polymer Colloids, Tilton, NH, Etats-Unis, "High Solids Content Latexes."

**2002**

5. Journée Thématique de la Fédération des Polyméristes Lyonnais, Lyon, France, "Nouveau Modèle pour la croissance des particules pendant la polymérisation des olefins."

**2001**

4. Leuven Summer School on Catalysis, Ostend, Belgique, "Modelling of particle growth in olefin polymerisation"
3. NASCRE: North American Symposium on Chemical Reaction Engineering, Houston, TX, USA, "Progress and Challenges in Describing Particle Growth for Polyolefins."

**2000**

2. Conference on Insertion Polymerization at BASF Aktiengesellschaft, Ludwigshafen, Germany, "Modelling Transfer Phenomena in Heterogeneous Catalysts for Polyolefins," Sept. 28-29, 2000.
1. Polymer Reaction Engineering IV, Palm Coast, Florida, USA "Reaction Engineering Aspects of Polyolefins."

**Invited Presentations (Industrial groups)**

**2025**

39. SABIC Europe, Geleen, NL, 11 September 2025, Slurry and Gas Phase Reactors.
38. CP Chem, Bartlesville OK, USA, Frontiers of Technology Speaker Series, Gas phase ethylene polymerization at the CP2M: Our capacities and a study on sorption effects on kinetics, parameters, and processes, 19 June 2025 (video)

**2024**

38. Arkema, Lacq FR, Reaction Engineering: at the interface between chemistry, physical chemistry and processes, Arkema Days, 7 November, 2024.
37. Borealis Invited Talk Series (Polymer Reaction Engineering Competence Network), Linz AT and Porvoo FI, 04 June, 2024 (video)
36. W.R. Grace Technical External Speaker Series, W.R. Grace, Columbia, MD, USA, 23 May, 2024 (video)
35. ExxonMobil Chemicals, An overview of polyolefins research, Baytown, TX., USA, 05 March, 2024

**2023**

34. Nova Chemicals, Polyolefin Reaction Engineering: current challenges in gas phase ethylene polymerization, Calgary Alberta, 31.10.2023

**2019**

33. ExxonMobil Chemicals, Understanding the impact of condensing agents on gas phase PE processes, Baytown, TX, USA, 25 October, 2019

**2017**

32. Integrated Lab Solutions, Berlin DE, Reactor Design: Improved tools for laboratory investigation of gas and slurry phase polymerisation of olefins, 6 February, 2017

**2016**

31. ExxonMobil Chemicals, Baytown, TX, "Impact of Induced condensing agents on the behaviour of gas phase ethylene polymerization," 24 October 2016
30. Total Petrochemicals Ltd., Deerpark TX, "Reaction engineering of olefin polymerisation," 20 April

**2015**

29. Michelin, Clermont-Ferrand, France, 2 April, 2015, "Polymers: products by process. The interaction of chemistry and reaction engineering in determining polymer properties".

**2014**

28. INEOS France, Lavéra, November 5, "The impact of ICA on ethylene polymerization,".

**2013**

27. ExxonMobil Chemicals, Baytown, TX, "Condensed mode cooling in polyethylene reactors," November 21
26. SABIC Technical Centre, Riyadh, Kingdom of Saudi Arabia, "New perspectives in polyolefin research – Reaction Engineering"
- 2012**
25. INEOS France, Scientific Day, "Specialised reactor technology for the study of polyolefins."
- 2011**
24. Polymer Latex, Marl, Germany, "Different technologies for miniemulsification."
- 2010**
23. Sherwin Willimans Company, Cleveland OH, USA, "High Polymer Content Dispersions: A review and some recent results."
22. Xerox Research Centre of Canada, Mississauga, ON, Canada, "Technologies for high solid content latex."
- 2009**
21. Cytec Surface Specialties, Drogenbos, BE, "Miniemulsification technologies."
- 2008**
20. Sherwin-Williams Company, Cleveland, OH, "Different Routes to High Solid Content Latexes."
19. GRUPO KUO, S.A.B, Mexico, " High Solid Content Latex Systems."
18. BASF GmbH, Ludwigshafen, Germany, "Emulsions, miniemulsions and reactors for latex production."
17. SulzerChemTech, Winterthur, Switzerland, "Emulsification for latex production: Static Mixers, Rotor Stators, Nanocomposites and Future Directions."
16. Xerox Research of Canada, Mississauga ON, " Emulsification for latex production: Rotor Stators, Static Mixers, Nanocomposites and Future Directions."
- 2005**
15. SABIC Europetrochemicals, Geleen, Pays Bas, "Polyolefin Research at the LCPP: Single particle growth and morphology."
14. SABIC Europetrochemicals, Geleen, Pays Bas, "Study of Impact copolymer particle growth."
13. Innovene NOH, Bruxelles, Belgique, "Polyolefin Reaction Engineering: Fundamental Particle Level Research."
12. BCC-SINOPEC, Beijing, China, "Study of Impact Copolymer Growth."
- 2004**
11. Xerox Research Centre of Canada, Mississauga, Canada, "Miniemulsion Polymerisation: A look at fundamentals, static mixing and some interesting (potential) end-uses."
10. Borealis OY, Porvoo, Finland, "The Morphology of Polyolefin Particles."
9. Borealis OY, Porvoo, Finland, "Improvements in the production of high impact polypropylene,"
- 2003**
8. Rhodia Recherches, Aubervilliers, France, "Génie de la polymérisation en milieu divisé."
- 2002**
7. Centre de Recherche Fina, Feluy, BE, "Vers une meilleure modélisation de la croissance des particules pendant la polymérisation des olefins."
6. Statoil, Trondheim, Norway, "Production of High Solids Content, Low Viscosity Latex for Pressure Sensitive Adhesives."
5. BP Chimie, Lavéra, France, "Modeling of Particle Growth, Fragmentation and final Morphology."
4. EUROFORUM Latex synthétiques et artificiels – Propriétés, Applications et Innovations, "Comment fabriquer des latex à haut taux de solide et à faible viscosité."
- 2001**
3. "Improved Particle Growth Models for Olefin Polymers," Invited Seminar, ExxonMobil Chemicals, Baytown, Texas, 5 January, 2001.
- 2000**
2. Targor GmbH, Ludwigshafen, Allemagne, "Future directions for research in polyolefins,"
1. Exxon Chemicals, Baytown Texas, "Modelling of heat transfer on polymerising particles: an overview with CFD."

### Invited Presentations (Academic Institutions)

#### 2024

26. KAUST, Jeddah, KSA, 25.01.2024, An overview of polyolefin reaction engineering research.

**2015**

25. Institut de Chimie de Clermont-Ferrand, Clermont-Ferrand, France, 2 April, 2015, "Polymers: products by process. The interaction of chemistry and reaction engineering in determining polymer properties".

**2013**

24. University of Houston, Chemical Engineering Department, "Polyolefin Reactors," November 22.
23. KAUST, Jeddah, Saudi Arabia, "Chemical Engineering Tools for a Better Understanding of the Polymerisation of Olefins on Supported Catalysts."

**2011**

22. Université de Strasbourg, Strasbourg, France, "Miniemulsification: Options for Efficient Miniemulsification and Continuous Processes."

**2009**

21. Ecole Polytechnique de Montreal, Montreal QC, Canada, "Emulsification using static mixers."
20. International Polymer Colloids Group Master Class Series, Il Ciocco, Italy, "An introduction to Polymer Reaction Engineering."

**2005**

19. Japan Advanced Institute for Science and Technology, Nomi, Ishikawa, Japan, "Single particle growth and morphology for polyolefins."
18. LGC, Toulouse, France, "A look at fundamentals, static mixing and some interesting (potential) end-uses of miniemulsion polymerization."
17. Chinese Academy of Forestry, Nanjing, China, "Recent Advances in Emulsion Polymerisation."
16. Zhe Jiang University, Hangzhou, China, "Single Particle Growth and Morphology Modelling for Polyolefins."
15. Heriot Watt University, Edinburgh, Scotland, "Challenges in Polymerisation in Dispersed Media."

**2004**

14. Universidad Politecnico de Madrid, Madrid, Spain, "Polymer Reaction Engineering: What is it? Why Bother? A "Forest Talk."
13. University of Porto, Porto, Portugal, "Dynamic Simulation of Particle Formation in Batch Emulsion Polymerization: A New Nucleation Profile."
12. Instituto Superior Tecnico, Lisbon, Portugal "High Solid Content Latices."
11. Journée SFGP sur l'application des MFN aux Réacteurs, Paris, France, "Applications de CFD en génie de la polymérisation: Quelques exemples et beaucoup d'ouvertures."
10. Queen's University, Kingston, Ontario, Canada, "Dynamic Simulation of Particle Formation in Batch Emulsion Polymerization: A New Nucleation Profile."

**2003**

9. University of Ottawa, Ottawa, Canada, University of Ottawa Research Seminar, "Latex production via emulsions and miniemulsions,"

**2000**

7. Group on Reactor Technology in Petrochemistry and Polymer Industry, SINTEF, NTNU Gloschaugen, Trondheim, Norvège, "Progress and Challenges in the study of Heat and Mass Transfer during the Production of Polyolefins."
6. University of Western Ontario, "Heat and Mass Transfer during Olefin Polymerisation."
5. Queen's University, Kingston, Ontario, Canada, "Improved Models for Mass Transfer in Heterogeneous Catalysts."

**1999**

4. University of Sao Paulo, SP, Brazil, "Applications of Non-linear State Estimators in Free Radical Polymerisation."
3. Faculdade de Engenharia Quimica de Lorena, Lorena/SP, Brazil, "Recent Developments in Heat and Mass Transfer during the Polymerisation of Olefins."

**1998**

2. University of Twente, Enschede, Pays Bas, "State of the art in the modelling of heat and mass transfer during the gas and slurry polymerisation of olefins."

**1994**

1. University of Twente, Enschede, Pays Bas, "Transport phenomena during the catalysed polymerisation of olefins."

### **Conferences: Oral Presentations (Selection via Abstract Submissions)**

#### **2025**

122. M. Nolasco Araujo, T. Boucheres, N. Sheibat-Othman, T.F.L. McKenna, EFCE Working Party on Polymer Reaction Engineering (WPPRE), Prague, République Czech, 14-16 mai, 2025, "Modelling of Vinylidene Fluoride Emulsion Polymerization"

#### **2023**

121. R. Lopes do Rosario, F. Christakopoulos, T. Tervoort, T.F.L. McKenna, A new gas phase process for ultra high molecular weight polyethylene: crystallization vs chain growth, Canadian Chemical Engineering Conference, 29 Oct.-01 Nov., 2023, Calgary, AB, Canada
120. E.K. Gelinski, N. Sheibat-Othman, M.G. Torres Aladro, T.F.L. McKenna, Mass transfer effects in supercritical/liquid emulsion polymerizations – toward high solid content PVDF Latexes, Canadian Chemical Engineering Conference, 29 Oct.-01 Nov., 2023, Calgary, AB, Canada
119. E.K. Gelinski, T.F.L. McKenna, Increasing Solid Content in Vinylidene Fluoride Emulsion Polymerization: Mass transfer effects in supercritical/liquid emulsion polymerizations, 14<sup>th</sup> International workshop on polymer reaction engineering, 5-8 Spet., 2023, Potsdam, DE

#### **2022**

118. K. Kulajanpeng, N. Sheibat-Othman, W. Tanthapanichakoon, T.F.L. McKenna, Modelling Of A Multizone Circulating Reactor For Propylene Polymerization, Polymer Reaction Engineering XI, 11-14 Dec., 2022, Phoenix AZ, USA
117. R. Lopes do Rosario, F. Christakopoulos, T. Tervoort, T.F.L. McKenna, Characterization of Disentangled UHMWPE, Polymer Reaction Engineering XI, 11-14 Dec., 2022, Phoenix AZ, USA
116. K. Kulajanpeng, N. Sheibat-Othman, W. Tanthapanichakoon, T.F.L. McKenna, Multiscale modelling of multizone circulating reactor for propylene polymerization, CHISA, 21-25 August, Prague, CZ

#### **2021**

115. T.F.L. McKenna, N. Sheibat-Othman, A. Ben M'Rad, F. Andrade, N. Ishola, Constraint optimization of grade transitions in fluidized bed reactors of polyethylene, 50 ans du GFP, 12-15 Nov, 2021, Lyon FR

#### **2019**

114. Juliete SILVA, Angelo Henrique de Lira Machado, Muriel Lansalot, Franck D'Agosto, Fabricio Machado Silva e Timothy McKenna, "Synthesis of Monomodal Latex with high solid content through semi-batch emulsion polymerization," Congresso Brasileiro de Polimeros, Bento Gonçalves (RS), Brésil, 27-31 October 2019.
113. Yue YU, Timothy F.L. McKenna, "Gas Phase Propylene (Pre)Polymerization: A mechanistic elucidation of the effects of mineral oil," Blue Sky Conference on Olefin Polymerization, Sorrento, Italy, June 24-28, 2019
112. Timothy F.L. McKenna, "Condensed Mode Cooling: The Impact of Induced Condensing Agents on Gas Phase Polymerisation of Ethylene," Blue Sky Conference on Olefin Polymerization, Sorrento, Italy, June 24-28, 2019
111. Amel Ben M'RAD, Timothy F.L. McKenna, "Experimental and modeling study of ethylene polymerization in gas phase reactors : Impact of thermodynamics," DECHEMA Workshop on Polymer Reaction Engineering, Hamburg, Germany, 11-14 June, 2019
110. Timothy F.L. McKenna, "Condensing agents in ethylene polymerisation: It's not just the heat!," DECHEMA Workshop on Polymer Reaction Engineering, Hamburg, Germany, 11-14 June, 2019

#### **2018**

109. T.F.L. McKenna, "Evaluation of catalyst performance in gas phase polymerization of ethylene on metallocene catalysts," Can. Conf. Chem. Eng., 28-31 Oct., 2018, Toronto, ON, Canada
108. B. Rezende-Lara, M.A. Bashir, T.F.L. McKenna, "Evaluation of catalyst performance in gas phase polymerization of ethylene on metallocene catalysts," Can. Conf. Chem. Eng., 28-31 Oct., 2018, Toronto, ON, Canada
107. R. Alves, T.F.L. McKenna, "Condensed Mode Cooling: The Impact of Induced Condensing Agents on the

Behaviour of Fluidised Bed Reactors,” Can. Conf. Chem. Eng., 28-31 Oct., 2018, Toronto, ON, Canada

#### 2017

106. A. Cancelas Sanz, V. Monteil, T.F.L. McKenna, Impact of Catalyst Injection Conditions in the Gas Phase Polymerization of Propylene, International Conference on the Reaction Engineering of Polyolefins, Geleen, The Netherlands, 6-9 June, 2017
105. M.A. Ahsan Bashir, V. Monteil, Ch. Boisson, T.F.L. McKenna, International Conference on the Reaction Engineering of Polyolefins, Geleen, The Netherlands, 6-9 June, 2017

#### 2016

104. T.F.L. McKenna, N. Sheibat-Othman, Scale-up/Scale-Down of Emulsion Polymerisations, Entretiens du Centre Jacques Cartier, Lyon, FR, 21 Novembre 2016
103. S. Aryafar, N. Sheibat-Othman, T.F.L. McKenna, Coupling of Computational Fluid Dynamics and Population Balance Modelling for Emulsion Polymerization Process, Can. Conf. Chem. Eng., Laval, PQ, Canada, 16-20 October 2016.
102. T.F.L. McKenna, Challenges for ICA use in olefin polymerisation, Blue Sky Conference, Sorrento IT, 27-30 June, 2016.
101. T.F.L. McKenna, Impact of Induced Condensing Agents in the Gas Phase Polymerisation of Ethylene, Workshop on Polymer Reaction Engineering, Hamburg DE, 17-20 May, 2016

#### 2015

100. M.A. Bashir, C. Boisson, V. Monteil, T.F.L. McKenna “The effect of silica dehydroxylation temperature on catalytic performance of supported (n-BuCp)<sub>2</sub>ZrCl<sub>2</sub> in ethylene polymerisation” European Conference on Chemical Engineering – ECCE 10, 27-31 Sept., 2015, Nice, France.
99. M.A. Bashir, V. Monteil, M. Al-Haj Ali, V. Kannelopoulos, T.F.L. McKenna, “Cosolvent effects in Multicomponent Penetrants/polymer Systems assessed by estimating partial molar volumes of penetrants in polymers,” European Conference on Chemical Engineering – ECCE 10, 27-31 Sept., 2015, Nice, France.
98. T.F.L. McKenna, “Condensed mode cooling of ethylene polymerisation: the influence of inert condensing agent on polymerisation,” European Conference on Chemical Engineering – ECCE 10, 27-31 Sept., 2015, Nice, France.

#### 2014

97. M. Namkajorn, A. Alizadeh, T.F.L. McKenna, “Condensed mode cooling of ethylene polymerisation: the influence of inert condensing agent on polymerisation,” Canadian Conference on Chemical Engineering 2014, Niagara Falls, ON, Canada, 2014, 20-23 October.
96. J. Pohn, T.F.L. McKenna, “Extrapolation des procédés de production de latex polymère: réacteurs et coagulateurs,” Congrès Francophone du Génie des Procédés, 28-30 May, 2014, Agadir Morocco
95. A. Alizadeh, T.F.L. McKenna, “Une étude du rôle du condensate “inerte” dans des réacteurs à lit fluidisés pour la production de polyoléfines” Congrès Francophone du Génie des Procédés, 28-30 May, 2014, Agadir Morocco
94. T. McKenna, V. Monteil, C. Boisson, S. Norsic, C. Ngodi, Lab scale gas phase reactors for the study of olefin polymerisation, Nextlab 2014, IFPEN Rueil-Malmaison, 2-4 April, 2014

#### 2013

93. J. Pohn, M. Cunningham, T.F.L. McKenna, “Scale-up de procédés de polymérisation et de coagulation,” Club Emulsion, Montpellier, France, 26 September
92. A. Alizadeh, M. Namkajorn, E. Somsook, T. F. L. McKenna, “Cosolubility effect during gas phase ethylene polymerisation on supported catalyst: from experimental to modelling analysis,” Advances in Polymer Science and Technology, Johannes Kepler University, September 9-11, Linz, Austria
91. M.A. Bashir, M. Al-Haj Ali, V. Kannelopoulos, T.F.L. McKenna, “Modeling of  $\alpha$ -olefins Solubility in Semi-crystalline Polyolefins by Combining the Sanchez-Lacombe Equation of State with Elastic Constraints Models”, International Conference on the Reaction Engineering of Polyolefins, Sept. 2-5, 2013, Ferrara, Italy.
90. A. Alizadeh, M. Namkajorn, E. Somsook, T.F.L. McKenna, “Effect of n-hexane as inert condensing agent (ICA) during gas phase ethylene polymerization on supported catalyst: from experimental to modeling analysis”, International Conference on the Reaction Engineering of Polyolefins, Sept. 2-5, 2013, Ferrara, Italy.
89. T.F.L. McKenna, “Specialised tools for a better comprehension of olefin polymerisation reactors,”

- DECHEMA Workshop on Polymer Reaction Engineering, Hamburg, Germany, May 21-24, 2013
88. T.F.L. McKenna, "Novel technologies for waterborne coatings," Waterborne, High-Solids, and Powder Coatings Symposium, New Orleans LA, USA, Feb 4-8, 2013
- 2012**
87. N.M.B. Smeets, T.F.L. McKenna "Catalytic Chain Transfer in Microemulsion Polymerization," Polymers in Dispersed Media, PDM-2012, April 16-19, 2012, Lyon, France
86. E. Bourgeat-Lami, G.A. Farzi, L. David, J.L. Puteaux, T.F.L. McKenna, "Miniemulsion polymerization of silica-loaded monomer nanodroplets: insight into droplet morphology and nucleation," PDM-2012, April 16-19, 2012, Lyon, France
85. J. Pohn, M. Heniche, L. Fradette, M. Cunningham, T.F.L. McKenna, "Using a Computational Framework to Model the Scale-Up of Polymer Latex Reactors," PDM-2012, April 16-19, 2012, Lyon, France
- 2011**
84. E. Tioni, V. Monteil, T.F.L. McKenna, R. Spitz, "Morphological explanation for unusual PE crystallization behavior at polymerization start-up.," COGEPRA 2011, Grenoble, France
- 2010**
83. E. Tioni, V. Monteil, T.F.L. McKenna, R. Spitz, J.P. Broyer, "Gas phase stopped flow polymerization of ethylene on packed bed: start up kinetics of supported metallocene catalysts and characterization of nascent polymers under realistic and controlled conditions" 3rd Blue Sky Conference on Catalytic Olefin Polymerization. 20-23 June 2010 - Hilton Sorrento Palace, Sorrento, Italy
82. J. Pohn, M. Heniche, L. Fradette, M. Cunningham, T.F.L. McKenna, "Computational Analysis of Mixing and Scale-up in Emulsion Polymerization Reactors," 10th International Workshop on Polymer Reaction Engineering, Oct 10-13, 2010, Hamburg, Germany
81. E. Tioni, V. Monteil, T.F.L. McKenna, R. Spitz, J.P. Broyer, "Packed bed minireactor for pulsed gas phase catalytic polymerization: complex interactions between heat transfer and activity in stopped flow ethylene polymerization," 10th International Workshop on Polymer Reaction Engineering, Oct 10-13, 2010, Hamburg, Germany
- 2009**
80. T.F.L. McKenna, "High Solid Content Polyacrylic Latexes via Emulsion and Miniemulsion Polymerisation," Waterborne Coatings Conference, February 19, 2009, New Orleans.
79. Bourgeat-Lami, E., V. Mellon, F. Pardal, J.-L. Puteaux, T.F.L. McKenna, A. Bonnefond, M. Micusik, M. Paulis, J.R. Leiza, E. Schreider, K. Landfester, B. Lohmeijer, "Acrylic/Clay Nanocomposite Latexes: Synthesis, Structure and Properties," European Coatings Congress – 31 March- 2 April 2009, Nüremberg, Germany
78. C. Creton, E. DeGrandi, L. Sonnenberg, R. Udagama, E. Bourgeat-Lami, T.F.L. McKenna, A. Lopez, J.M. Asua, "Mechanical and adhesive properties of nanostructured waterborne pressure-sensitive adhesive films," European Coatings Congress – 31 March- 2 April 2009, Nüremberg, Germany
77. T.F.L. McKenna, U. El-Jaby, M.C. Cunningham, Static mixers for the production of miniemulsions, PRE VIII, Niagara Falls, May 2009.
76. U. El-Jaby, M. Cunningham, T.F.L. McKenna, Progress towards high solid content miniemulsions: Formulation and Process Investigation, IPCG 2009 Conference, July 3-9, 2009
- 2008**
75. G.A.Farzi, E. Bourgeat-Lami, T.F.L. McKenna, "Preparation of silica/polyacrylate nanocomposite latexes", 2d Conference on nanostructured materials – 11-14 March 2008, Kish university, Kish Island, Iran
74. V. Mellon, N. Negrette-Herrera, J.L. Puteaux, T.F.L. McKenna, E. Bourgeat-lami, "Incorporation of Laponite clay platelets into polymer latexes: evidence of clay localization by cryo-TEM imaging", Particles 2008 – 12-14 May 2008, Orlando, USA
73. Sang-Young Shin, T.F.L. McKenna, L.C. Simon, J.B.P. Soares, G. Scholz, "Gas-Phase Polymerization at High Pressure with MMT/TIBA/UOH/ Cp2ZrCl2", INCOREP, 22-27 June 2008, Montreal, Canada.
72. E. Degrandi, C. Creton, A. Lopez, J.M. Asua, R. Udagama, E. Bourgeat-Lami, T.F.L. McKenna, E. Canetta, J.L. Keddie, "Waterborne polyurethane-acrylic hybrid nanoparticles by miniemulsion polymerization: mechanical properties of nanostructured films", 48th Micro symposium on Polymer Colloids – 20-24 July 2008, Prague, Czech Republic.
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59. Fortuny, M., A.F. Santos, P. Araujo, T.F. McKenna, "MODELAGEM DA COALESCÊNCIA DE EMULSÕES POLIMÉRICAS INDUSTRIAIS," Congresso Brasileiro de Engenharia Química, XV COBEQ, Curitiba (Paraná) Brasil, 26- 29 September.
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27. Gantillon, B., T. McKenna, R. Spitz, "Advances in post-condensation polymerization of ethylene terephthalate," Paper 69e, 3rd Annual Polymer Producers Conference AIChE Spring Meeting, Houston, TX, March 14-18, 1999.
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22. McKenna, T.F., P. Wild, D. Cokljat, "CFD Modelling of Heat Transfer during Gas Phase Olefin Polymerisation," ESCAPE-8, Brugge, Belgium, 24-27 May, 1998.
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16. McKenna, T.F., "Polymer Reaction Engineering in Lyon: A general overview," 5th Working Party on Polymer Reaction Engineering, Lyon, France, 5-7 September, 1997
15. McKenna, T.F., A. Villanueva "Non-ideal Kinetic Behaviour of Free Radical Polymerisation," 5th Working Party on Polymer Reaction Engineering, Lyon, France, 5-7 September, 1997

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14. McKenna, T.F., B. Billy, "Control of Droplet Size in Suspension Polymerisation: A Novel method for Eliminating the Influence of Mixing Conditions, " 4th Meeting of European Federation of Chemical Engineering Working Party on Polymer Reaction Engineering, Thessaloniki, Greece, Sept. 21-22, 1996.
13. McKenna, T.F., "Advances in Modelling of Heat and Mass Transfer: Polymerisation of Olefins on Highly Active Zielger-Natta Catalysts," 4th Meeting of European Federation of Chemical Engineering Working Party on Polymer Reaction Engineering, Thessaloniki, Greece, Sept. 21-22, 1996.
12. McKenna, T.F., "Computer Aided Process Design: Short-cut design for polymer production.," ESCAPE-6, Rhodes, Greece, May, 1996.

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11. McKenna, T.F., B. Billy, "Use of membranes in the generation of monodisperse particles in suspension polymerisation," 3rd Meeting of European Federation of Chemical Engineering Working Party on Polymer Reaction Engineering, Sitges, Spain, 6-7 May, 1995)

10. McKenna, T.F., "Modèle simplifié d'un évaporateur à film raclé: Equipement pour l'élimination des résidus volatils d'un polymère fondu," Vième Congrès du Groupe Français du Génie des Procédés, 19-21 September, 1995.
9. McKenna, T.F., S. Othman, G. Févotte, H. Hammouri, "Contrôle en ligne d'un réacteur de polymérisation," Vième Congrès du Groupe Français du Génie des Procédés, 19-21 September, 1995.
8. McKenna, T.F., "Aspects du transfert d'énergie pendant la polymérisation des oléfines," Vième Congrès du Groupe Français du Génie des Procédés, 19-21 September, 1995.
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6. McKenna, T.F., "Modelling of Transport Phenomena in Ziegler-type Catalysts: Olefin Polymerisation. Differences between Observations and Model Predictions," 2nd Meeting of European Federation of Chemical Engineering Working Party on Polymer Reaction Engineering, Loughborough, U.K., Sept. 14-15, 1994.
5. R. Spitz, J. DuPuy, J.P. Broyer, T. McKenna, "Diffusion effects in Olefin Polymerisation: Reconciliation of theory and experiment." International Symposium on Synthetic, Structural and Industrial Aspects of Stereospecific Polymerisation Milano, Italy, June 6-10, 1994.
4. McKenna, T.F., D. Schweich, "Copolymerisation of olefins on Ziegler-type catalysts: Heat and mass transfer during particle growth," 4th International Workshop on Polymer Reaction Engineering, Berlin, 13 October, 1992.
3. McKenna, T.F., "Conception des Procédés de Polymerisation" Stage de Perfectionnement, Centre de Perfectionnement des Industries Chimiques, ENSIC, Nancy, 1991,
2. McKenna, T.F., M.F. Malone, "Process design for polymer production," Foundations of Computer-Aided Process Design, Snowmass CO, July, 1989.
1. McKenna, T.F., M.F. Malone, "A systematic procedure for the design of polymer production processes," AIChE National Meeting, Washington D.C., Dec., 1988.

#### Poster Presentations

##### 2024

197. M. Mondillon, N. Sheibat-Othman, C. Boisson, T.F.L. McKenna, "Thermodynamics of the catalytic solution polymerization of ethylene and butadiene," 32nd Colloquium on Organometallic Chemistry for Catalysis, Beyrouth, DE, 12+13 September 2024

##### 2023

196. M. Nolasco, N. Sheibat-Othman, T.F.L. McKenna, "An experimental and modelling study of the emulsion polymerization of VDF," 14<sup>th</sup> International workshop on polymer reaction engineering, 5-8 Spet., 2023, Potsdam, DE
195. R. Lopes do Rosario, F. Christakopoulos, T. Tervoort, T.F.L. McKenna, Disentangled Uhmwpe - Control of Crystallization, Chain Entanglement Via Process Conditions, Bluesky-INCOREP Polyolefin Conference, 12-16 June, 2023, Sorrento, Italy
194. R. Lopes do Rosario, F. Christakopoulos, T.F.L. McKenna, Characterization of Disentangled Uhmwpe, Bluesky-INCOREP Polyolefin Conference, 12-16 June, 2023, Sorrento, Italy
193. K. Kulajanpeng, N. Sheibat-Othman, W. Tanthapanichakoon, T.F.L. McKenna, Experimental Study Of Multicomponent Solubility In Polypropylene, Bluesky-INCOREP Polyolefin Conference, 12-16 June, 2023, Sorrento, Italy
192. K. Kulajanpeng, N. Sheibat-Othman, W. Tanthapanichakoon, T.F.L. McKenna, Modelling Of A Multizone Circulating Reactor For Propylene Polymerization, Bluesky-INCOREP Polyolefin Conference, 12-16 June, 2023, Sorrento, Italy
191. A. Albeladi, A. Moman, T.F.L. McKenna, Impact Of Process Poisons On The Performance Of Post-Phthalate Supported Ziegler Natta Catalysts In Gas Phase Propylene Polymerization, Bluesky-INCOREP Polyolefin Conference, 12-16 June, 2023, Sorrento, Italy
190. F. Morais Bolner, J. Raynaud, T.F.L. McKenna, Development Of Novel Iron-Based Ziegler-Natta-Type Catalysts For Ethylene Polymerization, Bluesky-INCOREP Polyolefin Conference, 12-16 June, 2023, Sorrento, Italy
189. O. Boyron, R. Lopes do Rosario, O. Boulan, M. Taam, T.F.L. McKenna, Chain Entanglement in UHMWPE, Internation Conference on Polyolefin Characterization, 21-24 May, 2023, Valencia, Spain

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188. M. Torres Aladro, N. Sheibat-Othman, T.F.L. McKenna, Mass Transfer and Agitation in the Emulsion Polymerization of Vinylidene Fluoride, Polymer Reaction Engineering XI, 11-14 Dec., 2022, Phoenix AZ, USA.
187. Niyi B. Ishola, Amel Ben M'Rad, Nida Sheibat-Othman, Timothy F.L. McKenna, Gas Phase Ethylene Polymerisation: What is the impact of condensed mode?, Polymer Reaction Engineering XI, 11-14 Dec., 2022, Phoenix AZ, USA.
186. R. Lopes do Rosario, F. Christakopoulos, T. Tervoort, T.F.L. McKenna, Disentangled UHMWPE - Control of Crystallization, Chain Entanglement Via Process Conditions,
185. K. Kulajanpeng, N. Sheibat-Othman, W. Tanthapanichakoon, T.F.L. McKenna, Experimental Study Of Multicomponent Solubility In Polypropylene,
184. R. Alves, T.F.L. McKenna, Modelling of Fluidized Bed Reactors for Ethylene Polymerization – a Multiscale Model, Population Balance Modelling, 9-11 May, 2022, Lyon, France

**2019**

183. T.F.L. McKenna, N. Blazzio, N. Sheibat-Othman, N. Norsic, "A novel stopped for reactor for gas phase polymerization," Advances in Polyolefins 2019, Sept 22-25, 2019, Rohnert Park CA, USA
182. M. Gheghiani, N Caillol, S. Henrot, T.F.L. McKenna, N. Sheibat-Othman, "On-line monitoring of emulsion polymerization by SRS," 12<sup>th</sup> European Cngress of Chemical Engineering, Florence, IT, 15-19 September, 2019.
181. Rita Alves, T.F.L. McKenna, "Estimation of Diffusion Coefficients for Multiple Penetrant/Polymer Systems Based on Sorption Data," Blue Sky Conference on Olefin Poymerization, Sorrento, Italy, June 24-28, 2019
180. Rita Alves, T.F.L. McKenna, "Condensed Mode Cooling: The Impact of Induced Condensing Agents on the Behaviour of Fluidised Bed Reactors," Blue Sky Conference on Olefin Poymerization, Sorrento, Italy, June 24-28, 2019
179. Ben M'Rad, T.F.L McKenna, "Experimental and Modeling Study of Ethylene Polymerization in Gas Phase Reactors" Blue Sky Conference on Olefin Poymerization, Sorrento, Italy, June 24-28, 2019
178. Y.R. Blazzio, F.M. Bolner , B. Rezende Lara, T.F.L. McKenna, "Impact of physical properties of silica support on metallocene behavior in gas phase ethylene polymerization," Blue Sky Conference on Olefin Poymerization, Sorrento, Italy, June 24-28, 2019
177. Rita Alves, Timothy.F.L. McKenna, "Estimation of Diffusion Coefficients for Multiple Penetrant/Polymer Systems Based on Sorption Data," DECHEMA Workshop on Polymer Reaction Engineering, Hamburg, Germany, 11-14 June, 2019
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175. Yashmin Blazzio, Nida Sheibat-Othman, Timothy F.L. McKenna, "A novel Stopped Flow Reactor for Gas Phase Polymerization," DECHEMA Workshop on Polymer Reaction Engineering, Hamburg, Germany, 11-14 June, 2019
174. Fabiana N. Andrade, Timothy F.L. McKenna, "The impact of Induced Condensing Agents in the Presence of Hydrogen," DECHEMA Workshop on Polymer Reaction Engineering, Hamburg, Germany, 11-14 June, 2019
173. Sabrine Kardous, Nida Sheibat-Othman, Timothy F.L. McKenna, "Optimization of grade transition in fluidized-bed reactors accounting for condensed agent effects," DECHEMA Workshop on Polymer Reaction Engineering, Hamburg, Germany, 11-14 June, 2019

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172. B. Rezende Lara, M. Ahsan Bashir, T.F.L. McKenna, Impact of geometric properties of silica supports on metallocene catalyst behaviour, Polymer Reaction Engineering X, Punta Cana DR, 20-24 May, 2018
171. F.N. Andrade, R. Fulchiron, F. Colas, T.F.L McKenna, Kinetics of PE Crystallization, Polymer Reaction Engineering X, Punta Cana DR, 20-24 May, 2018
170. Yashmin R. Blazzio, T.F.L. McKenna, A new approach to stopped-flow reactions for slurry and gas phase olefin polymerisation, Polymer Reaction Engineering X, Punta Cana DR, 20-24 May, 2018
169. A. Cancelas Sanz, V. Monteil, T.F.L. McKenna, High Impact Polypropylene: Influence of copolymerization conditions on powder and polymer properties, Polymer Reaction Engineering X, Punta Cana DR, 20-24 May, 2018

**2017**

168. A. Cancelas Sanz, V. Monteil, T.F.L. McKenna, Impact of injection conditions on gas phase PP, European Polymer Federation, July 3-7, 2017, Lyon, FR,
167. A. Cancelas Sanz, V. Monteil, T.F.L. McKenna, High Impact Polypropylene: Influence of copolymerization conditions on powder and polymer properties, European Polymer Federation, July 3-7, 2017, Lyon, FR
166. A. Cancelas Sanz, V. Monteil, T.F.L. McKenna, Solubility of Propylene, ethylene and propylene-ethylene mixtures in polypropylene, European Polymer Federation, July 3-7, 2017, Lyon, FR,.
165. A. Cancelas Sanz, V. Monteil, T.F.L. McKenna, Impact of precatalyst and cocatalyst/EED precontacting in the gas phase polymerization of propylene, European Polymer Federation, July 3-7, 2017, Lyon, FR,.
164. B. Rezende Lara, K. Ouzineb, T.F.L. McKenna, Coating Technology: Morphology, Macroscopic behaviour and Characterization of Hybrid Polymeric Nanoparticles, European Polymer Federation, July 3-7, 2017, Lyon, FR,
163. A. Cancelas Sanz, V. Monteil, T.F.L. McKenna, Impact of injection conditions on gas phase PP, International Conference on the Reaction Engineering of Polyolefins, Geleen NL, 6-9 June 2017.
162. A. Cancelas Sanz, V. Monteil, T.F.L. McKenna, High Impact Polypropylene: Influence of copolymerization conditions on powder and polymer properties, International Conference on the Reaction Engineering of Polyolefins, Geleen NL, 6-9 June 2017.
161. M.A. Bashir, V. Monteil, Ch. Boisson, T.F.L. McKenna, Impact of Silica porosity on distribution of metallocene/MAO and on ethylene polymerization kinetics in slurry and gas phase processes, Geleen NL, 6-9 June 2017.
160. Y. Blazzio, Ch. Boisson, T.F.L. McKenna, A new membrane stopped-flow reaction prototype of gas phase olefin polymerization, International Conference on the Reaction Engineering of Polyolefins, Geleen NL, 6-9 June 2017.
159. D. Bouzid, T.F.L. McKenna, "modelling of HIPP growth during the EPR phase," International Conference on the Reaction Engineering of Polyolefins, Geleen NL, 6-9 June 2017.
158. A. Cancelas Sanz, V. Monteil, T.F.L. McKenna, Impact of precatalyst and cocatalyst/EED precontacting in the gas phase polymerization of propylene, International Conference on the Reaction Engineering of Polyolefins, Geleen NL, 6-9 June 2017.
157. Rita Ferreira Alves, T.F.L. McKenna, "Modelling the effects of adding an ICA to the gas-phase production of polyethylene," International Conference on the Reaction Engineering of Polyolefins, Geleen NL, 6-9 June 2017.
156. Fabiana Andrade, T.F.L. McKenna, "Impact of condensing agents at different temperatures in the gas phase polymerization of ethylene," International Conference on the Reaction Engineering of Polyolefins, Geleen NL, 6-9 June 2017.
155. A. Cancelas Sanz, V. Monteil, T.F.L. McKenna, Solubility of Propylene, ethylene and propylene-ethylene mixtures in polypropylene, International Conference on the Reaction Engineering of Polyolefins, Geleen NL, 6-9 June 2017.
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154. A.J. Cancelas, V. Monteil, T.F.L. McKenna, High Impact Polypropylene: Structure Evolution and impact on Reaction, Blue Sky Conference, Sorrento, IT, 27 June – 01 July, 2016
153. A.R. Martins, A.J. Cancelas, T.F.L. McKenna, A Study of the Gas Phase Polymerization of Propylene: The Impact of Catalyst Treatment, Injection Conditions and the Presence of Alkanes on Polymerization and Polymer Properties, Blue Sky Conference, Sorrento, IT, 27 June – 01 July, 2016
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40. P. Kittilsen, H. Svendsen, H.A. Jakobsen, T.F. McKenna & S.B. Fredriksen, "The effect of initial conditions on morphology in heterogeneous olefin polymerization," poster at International symposium on future technologies for polyolefin and olefin polymerization catalysis, Tokyo Institute of Technology, Japan, 21-24 March 2001.
39. Fortuny-Heredia, M., C. Graillat, T.F. McKenna, "Experimental modeling of monomer partitioning in emulsion systems," Poster presentation at the Gordon Research Conference on Polymer Colloids, July 1-6, 2001 Tilton, NH, USA.
38. Schneider, M., I. Bétrémieux, A. Guyot, C. Graillat, T. McKenna, "Product development and rheology of high solids content latexes," Poster presentation at the Gordon Research Conference on Polymer Colloids, July 1-6, 2001 Tilton, NH, USA.
37. T.F. McKenna, C. Kiparissides, G. Weickert, G. Storti, "Results of the CATAPOL project: I. Single Particle Growth and Modelling," poster accepted for presentation at the 7th International Workshop on Polymer Reaction Engineering, Hamburg, Germany, 8-10 October, 2001.
36. Santos, A.F., F. Bentes Freire, J.C. Pinto, R. Giudici, C. Graillat, T.F. McKenna, "On-line Monitoring of Emulsion Polymerisations: Conductivity and Real Time Calorimetry," poster accepted for presentation at the 7th International Workshop on Polymer Reaction Engineering, Hamburg, Germany, 8-10 October, 2001.
35. Schneider, M., I. Bétrémieux, A. Guyot, T.F. McKenna, "High Solids Content Emulsions: Product Development and Rheological Characterisation," poster accepted for presentation at the 7th International Workshop on Polymer Reaction Engineering, Hamburg, Germany, 8-10 October, 2001.
34. Le Sauze, N., Ouzineb, K., Ricard, A., McKenna, T., Xuereb, C., Apport des mélangeurs statiques lors d'une polymérisation en émulsion réalisée dans un réacteur en boucle," 8ème Congrès Francophone du Génie des Procédés, 17-19 October, 2001.

## 2000

33. Santos, A. F., A. Cherfi, T. McKenna, G. Fevotte, "In-Line Dielectric Monitoring of MMA/BuA Copolymerization Reactions," Polymer Reaction Engineering IV, Palm Coast, Florida, March 19-24, 2000.

32. Ouzineb, K., M. Fortuny Heredia, M. Schneider, C. Graillat, T.F. McKenna, "Emulsion polymerization with anionic and non-ionic surfactants," Polymer Reaction Engineering IV, Palm Coast, Florida, March 19-24, 2000.
  31. Kittilsen, P., T. F. McKenna "Mass Transfer Effects in the Production of High Impact Resistance Polymer," Polymer Reaction Engineering IV, Palm Coast, Florida, March 19-24, 2000.
  30. Gantillon, B., R. Spitz, T. McKenna, "Solid State Polycondensation of PET," Polymer Reaction Engineering IV, Palm Coast, Florida, March 19-24, 2000.
  29. Schneider, M., C. Graillat, T. McKenna, I. Bétremieux, "Preparation of High Solid Content Latex with Polymodal Particle Size Distribution (PSD), and evaluation of the PSD," Polymer Reaction Engineering IV, Palm Coast, Florida, March 19-24, 2000.
  28. Mattioli, V., T.F. McKenna, "Capillary condensation during olefin polymerisation," ECOREP Conference, Lyon, France, July 3-6 (2000).
  27. Martin, C., C. Novat, T.F. McKenna, "An Experimental Investigation of the Morphology of Polyolefin Particles," ECOREP Conference, Lyon, France, July 3-6 (2000).
  26. Martin, C., T.F. McKenna, "Inverse Gas Chromatography for Characterisation of Polyolefins: Exploration of Solubility, Diffusion and Particle Morphology," ECOREP Conference, Lyon, France, July 3-6 (2000).
  25. Ouzineb, K., C. Graillat, T.F. McKenna, "Study of the continuous emulsion polymerisation of butyl acrylate and methyl methacrylate," Working Party on Polymer Reaction Engineering, Lausanne, Suisse, 21-22 October, 2000.
  24. Santos, A. F., A. Cherfi, T. McKenna, G. Seytre, J.C. Pinto, G. Fevotte, "In-Line Dielectric Monitoring of MMA/BuA Copolymerization Reactions," Working Party on Polymer Reaction Engineering, Lausanne, Suisse, 21-22 October, 2000.
- 1999**
23. Fortuny Heredia, M., M. Schneider, C. Graillat, T. McKenna "A new look at kinetics and stabilisation phenomena in emulsion polymerisation," Polymerisation in Dispersed Media, Lyon, France, 12-15 April, 1999.
  22. Renard, B., T.F. McKenna, "Kinetics of Polymerisation of Partially Neutralised Acrylic Acid in INVERSE Suspensions," Polymerisation in Dispersed Media, Lyon, France, 12-15 April, 1999.
  21. Santos, A.M., G. Févotte, N. Othman, S. Othman, T.F. McKenna, "The on-line monitoring of methyl methacrylate-vinyl acetate emulsion copolymerisation," Polymerisation in Dispersed Media, Lyon, France, 12-15 April, 1999.
  20. M. Schneider, C. Graillat, T. McKenna, I. Bétremieux, "Preparation of High Solid Content Latex with Polymodal Particle Size Distribution (PSD)," Gordon Conference, June, 1999.
- 1998**
19. "Etude de mélange de la polymérisation radicalaire en milieu divisé," C. Graillat, T. McKenna, Colloque Programme de Recherche CNRS: Génie des procédés chimiques, physiques et biotechnologiques. Toulouse (FR), 26-27 November 1998.
  18. "Application d'observateurs d'état non linéaire au contrôle d'opération de polymérisation radicalaire," N. Othman, T. McKenna, S. Othman, A.M. Santos, H. Hammouri, G. Févotte, Colloque Programme de Recherche CNRS: Génie des procédés chimiques, physiques et biotechnologiques. Toulouse (FR), 26-27 November 1998.
  17. "Un algorithme adaptatif pour l'estimation calorimétrique de conversion globale en polymérisation radicalaire," G. Févotte, T. McKenna, A.M. Santos, Colloque Programme de Recherche CNRS: Génie des procédés chimiques, physiques et biotechnologiques. Toulouse (FR), 26-27 November 1998.
  16. "Suivi et Contrôle de la Copolymérisation Radicalaire," N. Othman, A.M. Santos, G. Févotte, S. Othman, T.F. McKenna, Poster présenté aux 11èmes Recontres Jacques Cartier: Le Génie de la Polymérisation en Ligne, Lyon France 7-9 Déc. 1998)
  15. "Production de latex polypopulés: vers un procédé continu," T.McKenna, M. Heredia, M. Schneider," Colloque Programme de Recherche CNRS: Génie des procédés chimiques, physiques et biotechnologiques. Toulouse (FR), 26-27 November 1998.
  14. "Comportement mécanique de films de copolymères styrène-acrylate de butyle. Influence de la composition," G. Vigier, P. Hajji, J.Y. Cavallé, G. Févotte, N. Othman, T. McKenna. Colloque Programme de Recherche CNRS: Génie des procédés chimiques, physiques et biotechnologiques. Toulouse (FR), 26-27 November 1998.
- 1997**

13. McKenna, T.F., A. Guyot "A New Method for Creating Polymerisable Suspensions with Well-Defined Particle Sizes", (Engineering Foundation Conference on Polymer Reaction Engineering, Palm Coast, Florida, USA, March 16-21, 1997).
12. Févotte, G., I. Barudio, H. Hammouri, T. McKenna, S. Othman, "The On-Line Control of the Glass Transition Temperature of Free Radical Emulsion Copolymerisations", (Engineering Foundation Conference on Polymer Reaction Engineering, Palm Coast, Florida, USA, March 16-21, 1997).
11. McKenna, T.F., I. Barudio, G. Févotte, "Free radical Solution polymerisation: monitoring and modelling of solution copolymerisations in real time," (ECCE1 Conference, Florence, Italy, May 4-7, 1997).
10. McKenna, T.F., A. Guyot, "Developments in Suspension Polymerisation: A New Method for Creating Polymerisable Suspensions," (ECCE1 Conference, Florence, Italy, May 4-7, 1997).
9. "Solubility and Crystallinity of Ethylene/Polyethylene Systems," T.F. McKenna (ECCE1 Conference, Florence, Italy, May 4-7, 1997).
8. "Kinetics and Mass Transfer in Polyolefin Reactions," V. Mattioli, C. Martin, T. McKenna (Working Party on Polymer Reaction Engineering, Lyon, France, 5-7 September, 1997)
7. "Monitoring and Control of Rapidly Evolving Copolymerisation: Example of MMA - Vinyl Acetate in Emulsion," A. M. Santos, G. Févotte, T. McKenna (Working Party on Polymer Reaction Engineering, Lyon, France, 5-7 September, 1997)
6. "A method for the control of Glass Transition Temperature in Free Radical Polymerisation, I. Barudio, G. Févotte, S. Othman, H. Hammouri, T. McKenna (Working Party on Polymer Reaction Engineering, Lyon, France, 5-7 September, 1997)

#### 1996

5. Févotte, G., I. Barudio, T.F. McKenna "Computer-Aided Parameter Estimation and On-line Monitoring of Polymerisation Reactors.," (ESCAPE-6, Rhodes, Greece, May, 1996).

#### 1995

4. Barudio, I., G. Févotte, T.F. McKenna, "Utilisation de la calorimétrie, la densimétrie et la modélisation pour le contrôle des copolymérisations," (V<sup>ième</sup> Congrès du Groupe Français du Génie des Procédés, les 19-21 September, 1995)
3. McKenna, T.F., G. Févotte, "Problèmes Rencontrés dans l'Utilisation de Capteurs en Ligne: Cas de la Densimétrie, Calorimétrie et Gravimétrie pendant une Copolymérisation en Solution," (Réunion du G.F.P., Nancy, 21-23 Nov., 1995)
2. McKenna, T.F., B. Billy, A. Guyot "Elaboration d'un Procédé Membranaire pour la Production de Suspensions Monodisperses," (Réunion du G.F.P., Nancy, 21-23 Nov., 1995)
1. McKenna, T.F., W. Ramirez, A. Guyot "Polymérisation du Styrène: Optimisation du mélange et de la taille des particules," (Réunion du G.F.P., Nancy, 21-23 Nov., 1995)

## Appendix 5. Supervision of Students

### Postdoctoral Fellows

19. **A. Medeiros**, "Production of XSBR latexes" 2017-2018
18. **T. Chaparro**, "" 2017-2018
17. **B. Rezende Lara** "Impact of Catalyst Geometry on Polymerisation Kinetics" 2017-2018
16. **M.A. Bashir** "Prepolymerisation of propylene in the gas Phase" 2017
15. **Y. Yue**, "Gas Phase Polymerisation of Ethylene," 2016-18
14. **D. Cheng**, "Scale-up of Emulsion polymerisation Processes," 2016-17
13. **A. Alizadeh**, "Condensed mode cooling for polyolefins," 2014
12. **R Udagama**, "High Solid Content Paint Binders," 2013-2014
11. **J. Pohn**, "Scale-up of emulsion polymerisation processes," 2013
10. **Raul P. MORAES**, "High solid content paper coatings," 2011
9. **Niels M.B. SMEETS**, "Creation of dispersions using novel technologies," 2009-2011
8. **Salima BOUTTI**, "Emulsification of acrylic monomers," 2009
7. **Yahya BANAT**, "Oscillating polymer structures," 2007 (Co- direction with Professor Guenter Weickert, U Twente)
6. **Audrey Di MARTINO**, "Kinetics of the nascent polymerisation of ethylene in the gas phase," 2006
5. **Erik ERIKSSON**, "Oscillating polymer structures," 2005-2006 (Co- direction with Professor Guenter Weickert, U Twente/PRT GmbH).
4. **Norma NEGRETE** "Clay-acrylic composite films via Miniemulsion Polymerisation," 2005-2006 (Co-direction with Mme Elodie BOURGEAT-LAMI).
3. **Djallel BOUZID**, "Use of Atomic Force Microscopy for the Study of High Impact Polypropylene" 2004-2005.
2. **Selwa BEN AMOR** "Suivie Calorimétrique et Commande des Réacteurs de Polymérisation, 1999-2000.
1. **Amilton MARTINS dos SANTOS**, " Commande des Réacteurs de Polymérisation," 1997

### PhD Students

#### Current

56. **Ifrah SHEIHK**, Gas phase vs slurry phase polymerization of ethylene, 2025-2029
55. **Manon MONDILLON**, Gel reduction in the solution polymerization of EBR, 2023-2026
54. **Ibrahim Abu MUTI**, Gas phase processes for ethylene polymerization, 2022-2025

#### Defended

53. **Ana Paula ALVES AMORIM**, Differences between gas and slurry processes in ethylene polymerization, *coencadré avec N. Sheibat-Othman*, 2022-120.02.2026
52. **Micheli NOLOASCO**, Multiscale Model for VDF polymerization, *coencadré avec N. Sheibat-Othman*, 2022-19.02.2026
51. **Salem Altaweel**, Gas phase processes for PP copolymers, 2022-2025
50. **Felipe BOLNER**, Iron catalysts for PE, *coencadré avec J. Raynaud*, 10.2020-12.2023
49. **Mariana Guadaloupe Torres**, "High solid content PVDF latexes," *coencadrée avec F. D'Agosto, M. Lansalot*, 10.2019-09.2022
48. **AbdulRahman Al-Beladi**, "Kinetics and morphology of gas phase polypropylene," 09.2019-09.2022
47. **Kusuma Kalajanpeng**, "Modelling of gas phase multizone PP reactors," 09.2019-09.2022
46. **Estela GELINSKI** "Coagulation in PVDF Emulsion Polymerisation" 12.2018-09.2022 *coencadrée avec N. Sheibat-Othman (LAGEP)* 05.2019-09.2022
45. **Roberta LOPES do ROSARIO** "Chain Entanglement in UHMWPE", 10.2018-12.2022
44. **Niyi ISHOLA**, "Gas Phase Polymerisation of ethylene – Thermodynamics and modelling," 03.2019-03.2022
43. **Rita ALVES**, "Condensed mode cooling of ethylene gas phase polymerisations" 09.2018-03.2021
42. **Amel BEN M'RAD**, "Thermodynamic aspects of olefin polymerisation," *coencadrée avec N. Sheibat-Othman (LAGEP)*, Defended Dec 2020.
41. **Yashmin BLAZZIO**, "Specialised reactors for the study of olefin polymerisation," Defended May 2020
40. **Juliet SILVA**, "High solid content latex via PISA/conventional emulsion", *cotutelle avec University of Brazilia*, Defended Dec 2020
39. **Fabiana ANDRADE**, "The influence of complex gas phase compositions on the polymerisation of ethylene," 2015-2019
38. **Aaron CANCELAS**, "High Impact Polypropene: Structure Evolution and impact on Reaction," UCB-Lyon 1, Lyon, France, Soutenance October 26, 2017

37. **Anderson MADEIROS**, "Magnetic nanoparticles by Miniemulsion Polymerisation," Federal University of Brazilia, 2017 (co-direction, Prof. F. Machado Silva, UFB, Brazil)
36. **Barbara REZENDE LARA**, "Adhesive films," UCB-Lyon 1, Lyon, France, April 2017
35. **Muhammad Ahsan BASHIR**, "Study of the impact of the geometric parameters of catalyst support on olefin polymerisation," *UCB-Lyon 1, Lyon, France*, November 2016
34. **Solmaz ARYAFAR**, "Scale-up/Scale-down of latex production processes," *UCB-Lyon 1, Lyon, France*, Soutenu 10 Nov 2016
33. **Ana Carolina MENDEZ**, "Scale up of vinylidene fluoride emulsion polymerisation," UCB-Lyon 1, Lyon, France, Soutenu Octobre 18, 2016
32. **Leila SANTOS**, "On-line monitoring of miniemulsions," Universidade Tridente, Aracaju, Brésil, June 2015 (co-supervision with A. Santos, Brésil)
31. **Arash ALIZADEH**, "Advanced morphological models for olefin polymerisation," *Queen's University, Kingston, Canada*, Soutenance juin 2014
30. **Montree NAMKAJORN**, "Olefin polymerisation during condensed mode operation," Madihol University, Bangkok, Thailand, 2014 (co-supervision with Prof. E. Somsook).
29. **Barbara BROWNING**, "Modelling and Experimental Study of a Fixed Bed Stopped Flow Reactor for Polyolefins," *UCB-Lyon 1, Lyon, France*, 2013
28. **Elena RANIERI**, "Kinetics of metallocene polymerisation," (Co-direction with Dr. Christophe Boisson) Soutenu 2012
27. **J. POHN**, "Modelling and experimental study of latex Stability," (Co-direction with Professor Michael Cunningham) *Queen's University, Kingston, Canada*, Soutenu 2012
26. **Estevan TIONI**, "The study of the role of the support, support preparation ad initial conditions on olefin polymerisation," (Co-direction with Dr. Vincent Monteil), *UCB-Lyon 1, Lyon, France*, Soutenu 2011
25. **Raul MORAES**, "High solid content latex for paper coatings." *Queen's University, Kingston, Canada*, Soutenu 2011
24. **Gabriela FONSECA**, "Miniemulsion polymerisation for adhesives," (Cosupervised with Prof. Marc. A. Dube, University of Ottawa) Soutenu 2010
23. **Ravindra UDAGAMA** "Acrylic-Alkyd Hybrids via Miniemulsion Polymerisation," *UCB-Lyon 1, Lyon, France*, Soutenu 2010.
22. **Ula EL-JABY** "Advanced applications of miniemulsions," (Co-direction with Professor Michael Cunningham), *Queen's University, Kingston, Canada*, Soutenu 2010
21. **Véronique MELLON** "Clay-acrylic composite films via Miniemulsion Polymerisation," (Co-direction with Mme Elodie BOURGEAT-LAMI), *UCB-Lyon 1, Lyon, France*, Soutenu 2009
20. **Ali FARZI** "Nanocomposite films from miniemulsions," (Co-direction with Mme Elodie BOURGEAT-LAMI), *UCB-Lyon 1, Lyon, France*, Soutenu 2008
19. **Hugo VALE**, "Modelling of the evolution of the PSD during emulsion polymerisation," *UCB-Lyon 1, Lyon, France*, Soutenu 2007
18. **Virginie TISSE**, "Ethylene polymerisation on silica-supported catalysts," *UCB-Lyon 1, Lyon, France*, Soutenu 2006.
17. **Fabricio MACHADO** "Polymerisation of propylene and butene on supported catalysts," (Co-direction with José Carlos PINTO) *COPPE/UFRJ Rio de Janeiro, Brazil*, Soutenu 2006
16. **Audrey DIMARTINO**, "Modelling of particle fragmentation, growth and morphology for polyolefins," *UCB-Lyon 1, Lyon, France*, Soutenu 2006
15. **Malihae PISHVAIE**; "Latex Rheology", (Co-direction with Philippe CASSAGNAU LMPBM), *UCB-Lyon 1, Lyon, France*, Soutenu 2005
14. **Audrey COSYNS**, "Dispersions de polymères à granulométrie multimodale : application aux revêtements aqueux," *UCB-Lyon 1, Lyon, France*, Soutenu 2005
13. **Erik ERIKSSON**, "Validation of transport models for the gas and slurry phase polymerisation of olefins," *UCB-Lyon 1, Lyon, France*, Soutenu 2005.
12. **Farschad FARSCHID**, "Commande de réacteurs de polymérisation en émulsion," (Co-direction with Professor Hassan HAMMOURI) *UCB-Lyon 1, Lyon, France*, Soutenu 2004
11. **Djallal BOUZID**, "Morphologie des particules de copolymères d'éthylène et de propylène," *UCB-Lyon 1, Lyon, France*, Soutenu 2004
10. **Thomas LYS**, "Mechanism of particle formation and growth in bimodal PVC latexes," *UCB-Lyon 1, Lyon, France*, Soutenu 2004
9. **Fabio BENTES FREIRE** "Advanced State Estimation for Emulsion Polymerisation," t(hèse en co-tutelle avec le professeur Reinaldo GIUDICI) *Universidade de Sao Paolo, Sao Paolo, Brasil*, Soutenu 2003
8. **Salima BOUTTI**, "Synthesis of High Solid Content Latexes," *UCB-Lyon 1, Lyon, France*, Soutenu 2003

7. **Alexandre SANTOS**, "Emulsion polymerisation: sensors and control," (Co-direction with Professor José Carlos PINTO), *Universidad federal de Rio de Janeiro*, Soutenué 2003
6. **Keltoum OUZINEB**, "Emulsion and Miniemulsion Polymerization : Stabilization, tubular reactors and practical applications," *UCB-Lyon 1, Lyon, France*, Soutenué 2003
5. **Montserrat FORTUNY**, "Modélisation de la polymérisation en émulsion de latex multipopulés," *UCB-Lyon 1, Lyon, France*, Soutenué 2002.
4. **Martine SCHNEIDER**, "Etude de Procédés de Synthèse de Latex Multipopulés à Haut Extrait Sec," *UCB-Lyon 1, Lyon, France*, Soutenué 2000
3. **Nida OTHMAN**, "Advanced Strategies for Composition Control in Semi-continuous Emulsion Polymerization," *UCB-Lyon 1, Lyon, France*, Soutenué 2000
2. **Christine MARTIN**, "Transport phenomena during polymerisation on heterogeneous catalysts." *UCB-Lyon 1, Lyon, France*, Soutenué 2000
1. **Virginie MATTIOLI**, "Aspects génie chimiques de la polymérisation polyphasiques" *UCB-Lyon 1, Lyon, France*, Soutenué 2000

#### **Master of Science (or equivalent)**

45. **Habiba SADDIK**, "Iron-based Ziegler-Natta catalysts – new tools for olefin polymerization," UCB Lyon 1 2026
44. **Javid RAMINOV**, "Vinyl Acetate Ethylene Emulsion Polymerization: Mass Transfer and Mixing," IFP School, 2025-26
43. **Emmanuel ABUGA**, " Catalyst Breakup during the High Pressure Polymerization of Ethylene: effect of reaction phase and catalyst type," IFP School, 2025-2026
42. **Maria AYADI**, "Étude thermodynamique de la démixtion de copolymère en solution," UCB Lyon 1, 2025
41. **Eya GARAOU**, "Mass transfer during the copolymerization of vinyl acetate and ethylene," INSAT Tunis, 2025
40. **Karin Nassif**, "Iron-based Ziegler-Natta Catalysts – New Tools for Olefin Polymerization," U. Poitiers, 2025
39. **Ifrah SHEIKH (M2)**, "Modelling of the internal morphology and mass transfer," UCB Lyon 1, 2025
38. **Ifrah SHEIKH (M1)**, "Mass transfer in ethylene polymerization," UCB Lyon 1, 2024
37. **Rawane CHREIM**, "Bimodal mibetallic ZN catalysts for PE," UCB Lyon 1, 2024
36. **Hanen TEMTEM**, "Mass transfer in emulsion polymerizations with water insoluble monomers," INSAT Tunis, 2024
35. **Ana Paula Alves Amorim**, "Swelling of polyethylene in slurry systems," *Federal University of Bahia*, Brasil, 2021-2022
34. **Yesmin Bel Hadj Hassine**, "Experimental Measurement and Modeling of the Solubility of Multicomponent Mixtures in Polyolefins," *INSAT Tunis, Tunisia*, 2022
33. **Felipe Bolner**, "Nascent Polymerization of Ethylene in the Gas Phase," *Federal University of Goiás*, Brailia, BR 2019-2020
32. **Igor Stefanichen Monteiro** "Copolymers of VF2" *University of Sao Paulo*, 2017
31. **Amel Ben M'Rad** "Thermodynamics in the suspension polymerisation of ethylene" *MSc INSAT Tunis* 2017
30. **Rita Alveres**, "Modelling of ethylene polymerisation," *MSc IST Lisbon*, 2015
29. **Duarte Morais CECILIO**, "Modelling of the impact of gas phase conditions on ethylene polymerisation," *MSc IST Lisbon*, 2015
28. **André Filipe Prates PEREIRA**, "Experimental study of latex coagulation," *MSc IST Lisbon*, 2015
27. **Ana Rita MARTINS**, "Effect of inert condensing agent on olefin polymerisation," *MSc IST Lisbon*, 2015
26. **Cyntich NGODI**, "A miniature fluidised bed reactor for olefin polymerisation," *M2 UCB Lyon 1, Génie des Procédés*, 2015-2015
25. **Margarida MARQUES**, "Coagulation of emulsion polymerisations," *IST Lisbon*, 2015-2015
24. **Ana Cristina OLIVEIRA**, "Kinetic model of metallocene polymerisation," *IST Lisbon*, 2015-2015
23. **Pedro RAIHNO**, "Ternary PC-SAFT Model of Olefin Solubility in Polyolefins," *IST Lisbon*, 2015-2015
22. **Cyntich NGODI**, "Microcalorimetry for the evaluation of the heat of sorption of inert condensing agents in polyethylene," *Université de Nantes, M1 Génie des Procédés*, 2013
21. **Jiranan WONGCHANOI**, "Encapsulation of phase change materials," *UCB Lyon 1, Génie des Procédés*, 2012
20. **Abdulrahman ASHRI**, "Influence of Silica Properties on the Behaviour of Catalysts for Olefin Polymerisation," *Queen's University, Kingston, Canada, Chemical Engineering*, 2012
19. **Robert COCKBURN**, "Polymerisation of Biosource monomers." (co-direction with Prof. Robin Hutchinson) *Queen's University, Kingston, Canada, Chemical Engineering*, 2011.
18. **Arash ALIZADEH**, "Modelling ZN polymerisation," *IFP School, ENSMP, Rueil-Malmaison, France*, 2009
17. **Sondes BOURIGA**, *UCB Lyon 1, Génie des Procédés*, 2007
16. **Zha LI**, "Production de Miniémulsions," *UCB Lyon 1, Génie des Procédés*, 2007

15. **Thomas GEREZ**, "Role of the support morphology of silica based metallocenes," *ESCAPE-Lyon, Génie des Procédés*, 2006.
14. **Ravindra UDAGAMA** "Emulsion Polymerisation of Butyl Acrylate – process intensification," *Polymer Science and Technology, University of Sri Jayawardanapura, Sri Lanka*, 2005
13. **Rémi BRIQUEL** "Le rôle du support dans la polymérisation d'éthylène avec des catalyseurs metallocenes," *ESCAPE-Lyon, Génie des Procédés*, 2005
12. **Sebastien FERRERO** "L'application de la calorimétrie à la suivi de réacteurs de polymérisation" *ESCAPE-Lyon, Génie des Procédés*, 2004
11. **Cristina ABRIL SANCHEZ** "Etude de la polymérisation de l'éthylène sur des catalyseurs à base de chrome," 2001
10. **Floran PRADES** "Etude d'une cascade de réacteurs agités pour la polymérisation en emulsion," *UCB-Lyon 1, DEA Matériaux Macromoléculaires*, 2000
9. **Djallel BOUZID** "Morphologie des particules de polyoléfines" *UCB-Lyon 1, DEA Matériaux Macromoléculaires*, 2000
8. **Kamel MAHFOUDI** "Phénomènes de transport de matière pendant la polymérisation des oléfines" *UCB Lyon 1, DEA Génie des Procédés*, 2000
7. **Sandrine MOREAU** "Production of multipopulated latices in stirred tank reactors" *ESCAPE-Lyon, Génie des Procédés*, 1999
6. **Béatrice RENARD** "Methods for polymerisation of acrylic acid in inverse suspension" *UCB-Lyon 1, DEA Matériaux Macromoléculaires*, 1998.
5. **Jérôme TORRES** "Emulsion copolymerisation in continuous stirred tank reactors" *UCB-Lyon 1, DEA Matériaux Macromoléculaires*, 1997
4. **Alvaro VILLANEUVA** "Cinétique de la polymérisation radicalaire en solution" *ENSPM Rueil-Malmaison*, 1997
3. **Nora GHERIB** "Elaboration of a reaction calorimeter for free radical polymerisation." *UCB Lyon 1, DEA Génie des Procédés*, 1996
2. **Boris BILLY** "A metallic membrane process for the suspension polymerisation of styrene." *UCB-Lyon 1, DEA Matériaux Macromoléculaires*, 1996
1. **Barbara GANTILLON** "Process for the production of PET in divided media." *UCB-Lyon 1, DEA Matériaux Macromoléculaires*, 1996

#### **Undergraduate Projects**

38. **Sherry Mikail**, "Sorption and Swelling of Polyethylene in Slurry Processes," *INSA de Lyon*, 2021
37. **Paulo ASSIS**, "High Solid Content Latexes with PISA," *USP – Lorena, BR*, 2018
36. **Abilio Augusto José Forni**, "Shear Induced Coagulation," *USP – Lorena, BR*, 2018
35. **Paulo ASSIS**, "Lattices for drag reduction application," *USP – Lorena, BR*, 2016
34. **Brian ZHONG**, "The impact of alkanes on the softening of polyethylenes," *MIT* 2015
33. **José Carlos JIMENEZ MENDOSA**, "Miniemulsion polymers for hybrid latexes," *ESCAPE-Lyon* 2013
32. **Wenhui HUA**, "L'évolution de la morphologie des poudres de polyéthylène (PE) produites sur des catalyseurs supportés", *ESCAPE-Lyon*, 2012
31. **Barbara REZENDE LARA**, "Elaboration of a latex aimed to promote the adhesion between PET substratum and Aluminium vacuum deposited, for the production of metalized films pasteurizable, sterilizable and with gas barrier dedicated to the flexible packaging of foodstuffs," *Engineering School of Lorena, University of São Paulo, EEL/USP*, 2012
30. **Ester SANCHEZ**, "Conductivity probes for the monitoring of emulsion polymerisation," *Escuela Técnica Superior de Ingeniería Industrial de Barcelona*, 2012
29. **Mireia Soy FLORIDIA**, "Encapsulation of phase change materials," *Escuela Técnica Superior de Ingeniería Industrial de Barcelona*, 2012
28. **Rachel LAM**, "Microemulsions using CCT" *Queen's University, Canada*, 2011 *ChEE 421*,
27. **Michael FREEMAN**, "Hyperbranched water-soluble polymers," *Queen's University, Canada*, 2011
26. **Scott CAMPBELL**, "Catastrophic Phase Inversion for Miniemulsification," *Queen's University, Canada*, 2010
25. **Natalie MACKENZIE**, "Grafting of styrene and PHA resins," (co-direction with Juliana Ramsay), *Queen's University, Canada*, 2010
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22. **Jessica ALBANESE**, "Products and processes of miniemulsions". *Queen's University, Canada*, 2010
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