



University
of Montpellier

ICG
Montpellier Institut
Charles Gerhardt
AIME

Aggregates, Interfaces
& Materials for Energy



Curriculum vitae

Marc J.M. ABADIE

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RESEARCH

Past research : Synthesis of Polymers & Copolymers (living systems, Ziegler Natta, Radical), UV/EB curing (coatings, composites), Radiolysis & Degradation by Y Rays, UP Resins, Vinylester & Epoxy Resins (Industrial fishing boats – CEO ‘‘Appli Composites’’), Self-healing Behavior, Dental Materials

Present Research : Synthesis (ROMP, ROP), Biodegradable Thermoplastic Elastomers, Chemistry of the interface/interphase in Composites & NanoComposites, New materials for aircraft manufacturing (sealant, GLARE), Polybenzimidazole AB-PBI, Ultra fast curing

PUBLICATIONS, PATENTS and BOOKS

412 refereed research papers, 95 MS and 52 PhD students, 13 patents (1 ICS/France, 2 MOD/UK, 3 IBM/USA, 7 NTU/Singapore), 14 books

Recent Books

- "High Performance Polymers - Polyimides Based - From Chemistry to Applications" edited by Marc J.M. Abadie, ISBN 978-953-51-0899-3, InTech, (December 2013) [*Visibility : more than 25,000 researchers worldwide read, downloaded and interacted with the published content*]
- “High-Performance Polymers for Engineering-Based Composites“ - Omari Muckbaniani, Marc J.M. Abadie & Tamara Tatrishvili, Edited by CRC Press (August 2015)
- “High-Performance Functional Polymers & Composites“ - Omari Muckbaniani, Marc J.M. Abadie & Tamara Tatrishvili, Edited by CRC Press (June 2016)
- ‘‘Polyimides & High Temperature Polymers’’ STEPI 10 Book, edited by Marc J.M. Abadie, University of Montpellier (Forthcoming June 2017)

Recent Congress

Key Note Speaker : -‘‘Polycondensation 2014’’ Sept, Tokyo Tech (Japan), -ICSP&AM4 Batumi Jul 1-4

Marc J.M. Abadie, Emeritus Professor - STEPI General Chairman
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2015 (Georgia), -Innovative Materials & Processes ICCE 2016, Nov 9-11, Iasi (Romania), -Romanian Academy of Sciences, Nov 11 2016 Bucharest, -6th International Conference on Ecological & Environmental Chemistry 2017, March 2-3, Chisinev (Moldova), -International Technology and Application Conference on Bio-based Materials, April 20-21 2017, Ningbo (China)

GRADUATE DEGREES

Chemical Engineer from Louis Pasteur University of Strasbourg, MS (in Chemistry 1961), Dr 3^e cycle (Polymer Chemistry 1963) and Dr es Sc (in Physics 1972), Institute Charles Sadron of Macromolecular Science, Louis Pasteur University of Strasbourg, France

CURRENT EMPLOYMENT

Institute Charles Gerhardt of Montpellier - Laboratory of Aggregates, Interfaces & Materials for Energy (ICGM - AIME, UMR-CNRS 5253), University of Montpellier, Faculty of Sciences, Place Bataillon, Montpellier 34095 Cedex 5, France

PROFESSIONAL & RELLEVANT EXPERTISE

- Engineer R&D SNPA/Total (1963-1967)
- Research Fellow @ CNRS/ICS (1967-1972)
- Assoc Prof @ U. Montpellier (1972-1975)
- Senior Scientist Officer @ "Propellants, Explosives and Rocket Motor Establishment" PERME/UK, Ministry of Defence in Waltham Abbey - UK (1975-1976)
- Professor @ U. Algiers and Director of Laboratory of Polymer Science (1976-1980)
- IBM'er in Endicott NY, USA (1982-1986)
- Professor @ U. Montpellier (1980-1982 and 1987-2007)
- Professor Emeritus @ the University of Montpellier, France (2009-present time)
- Expert Witness near Tribunal de Grande Instance de Montpellier (1980-present time)
- Expert to the Commission of the European Communities and to NATO
- Nominated by the French Government Official Examiner in Chemistry to the Concours at "Ecole Polytechnique" (1991-1997)
- **Consultant for**
 - o IBM, DuPont Electronics, Ethyl Corp. and Dental Medical Diagnostic Systems (USA)
 - o Rhône-Poulenc, Elf, LETI, Stento, Delta, IBM France, SPAD, Celliose, Gem Plus, Euracli and Veritas in France
 - o Ivoclar AGP in Switzerland
 - o Wacker Chemie GmbH and Opel AG in Germany
 - o Fratelli Lamberti spa in Italy

WORLDWIDE FUNCTIONS, HONORS and DISTINCTIONS

- ‘Michael Fam’ Professor (2004/2012) @ Nanyang Technological University, Singapore
- **Visiting Professor** :

- Aug-Oct (2014/present time) @ School of Materials Science & Engineering, Nanyang Technological University, Singapore
- Apr-May (2017) @ Engineering Chinese Academy of Sciences, Ningbo Institute of Materials Technology, Ningbo, Zhejiang Province, China
- **Master Class :**
 - Aug 2014 @ Korea Research Institute of Chemical Technology KRICT, @ Korea Advanced Institute of Science and Technology KAIST, Daejeon Republic of Korea South
 - Sep 2014 @ Somitomo Chemicals, Technical University of Toyohashi, Torray Co Ltd, Tokyo Tech, Japan
 - Feb-Mar (2017) @ “Institute “Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania
- Member of the International Eurasian Academy of Sciences
- Honorary Member of the Ukraine Academy of Sciences
- Honorary Fellowship of the Australian Institute of High Energetic Materials
- Professor Emeritus @ the University of Montpellier, France (2009-present time)
- ‘*honoris causa*’ from ‘Gh. Asachi’ Technical University, Iasi, Romania
- ADER Award for Transferring Technology to the Industry
- Award dedicated to the 70th birthday of Professor Marc J.M. Abadie, High Performance Polymers J., October 2009, Volume 21, No. 5
- Founder (1980) and General Chair of the “International Symposium on Polyimides & High Temperature Polymers” also known as “STEPI”. Take place every over 3/4 years in Montpellier. Next STEPI 11 will be on June 2-5 2019

WORLDWIDE INTERNATIONAL COOPERATIONS

- University of Vilnius, Prof Ricardas Makuska
- University of Warsaw, Prof Zbigniew Brozowski
- Institute of Polymers (CMPW) in Zabrze, PAN, Prof Zbigniew Jedliński, Prof Dana Sek
- Lviv Polytechnic University, Prof Michael Bratychak
- Kiev Taras Schevchenko University, Prof Volodymyr Syromyatnikov
- Institute Petru Poni, Prof Bogdan C. Simionescu, Dr Mariana Pinteala, Dr Maria Bruma
- Polytechnica Bucharest, Prof Sorin Vasilescu, Prof Mihai Dimonie, Prof Georgeta Popescu
- ‘ICECHIM’ Bucharest, Prof Mihail Ionescu
- C. Nenițescu Institute of Organic Chemistry, Prof Mircea Vuluga
- A.N. Nesmeyanov Institute of Organoelement Compounds ‘INEOS’ RAN, Prof Alexander L. Rusanov, Prof Yakov S. Vygodskii, Prof Igor Ponomarev, Prof Andrei Askadskii, Prof Valeri Vasnev
- Institute of Chemical Sciences in Almata, Prof Saule Kudaikulova, Prof Rinate Iskakov
- GE and Rensselaer Polytechnic Institute RPI, Prof James Crivello
- United Technologies Research Centre UTRC, Prof Dan Scola
- Nanyang Technological University, Singapore, Prof Y.C. Freddy Boey, Prof Subbu Venkatraman, Prof Vitali Lipik
- Ivane Javahishvili University, Tbilisi, Prof Omari Mukbaniani, Prof Vazha Tskovrebashvili, Prof Givi Papava

RESEARCH PHILOSOPHY

“If you think that education is expensive, try ignorance” (Derek Curtis Bok)

The university is a place of transfer knowledge where students learn the fundamental of work, knowledge, research and freedom of mind. Our role is to give them the tools and capacities to reach an ever more ambitious level of knowledge that will enable them to be able to approach their near and distant future and to flourish in life.

COLLABORTION WITH GEORGIAN COLLEAGUES

My first visit to Georgia (June 2006) was at the invitation of Prof Vazha Tskovrebashvili, trip organized and sponsored by the French embassy. During my stay in Tbilisi I gave a conference @ Ivane Javahishvili University, in the laboratory of Prof Omari Mukbaniani. Following this 1st meeting we decide to cooperate and organize a Conference on Polymers in Georgia. It was the beginning of our adventure which was finalized by the creation of the “1st International Caucasian Symposium on Polymers and Advance Materials” also known as ICSP&AM-1, Prof Omari Mukbaniani as Chair. This international conference meeting takes place every other two years in Georgia and attract people not only from Caucasia but also from Europe, US and Asia. Presently the ICSP&AM-5 will take place in Tbilisi, July 1-5, 2017

□ 3 hard cover books have been edited by CRC Press (US) during the four past conferences :

- “High-Perfomance Polymers for Engineering-Based Composites“ - Omari Muckbaniani, Marc J.M. Abadie & Tamara Tatrishvili, Edited by CRC Press (August 2015)
- “High-Performance Functional Polymers & Composites“ - Omari Muckbaniani, Marc J.M. Abadie & Tamara Tatrishvili, Edited by CRC Press (June 2016)
- “Polyimides & High Temperature Polymers” STEPI 10 Book, edited by Marc J.M. Abadie, University of Montpellier (Forthcoming June 2017)

□ 3 publications :

1. - O. Mukbaniani, J. Aneli, T. Tatrishvili, E. Markarashvili, M. Chigvinadze, M. Jean Medard Abadie. “Synthesis of cross-linked comb-type polysiloxane for polymer electrolyte membranes”. European Polymer J. 89, pp. 1-14, 2012
2. - High-Performance Polymers for Engineering-Based Composites. Editors Omari V. Mukbaniani, Marc J.M. Abadie & Tamara N. Tatrishvili. Apple Academic Press, Inc., 2016, pp. 408
3. - High Performance Functional Polymers and Composites. Editors Omari V. Mukbaniani, Marc J.M. Abadie & Tamara N. Tatrishvili. Apple Academic Press, Inc., 2017, pp. 400

□ International Caucasian Symposium on Polymers & Advanced Materials also know as ICSP&AM

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| 1. https://www.tsu.ge/icsp/ | 1 st ICSP&AM |
| 2. https://www.tsu.ge/icsp2/ | 2 nd ICSP&AM |
| 3. https://www.tsu.ge/icsp3/ | 3 rd ICSP&AM |
| 4. https://www.icsp4.tsu.ge/ | 4 th ICSP&AM |
| 5. https://www.icsp.tsu.ge | 5 th ICSP&AM |

□ 20 hours Lectures on “**Polymers and Environment - Green Chemistry**” presented to Ecology students including Tutorials and Quizzes. Please see in file attached “Content Syllabus”.

□ Beside this, in collaboration with Prof Eldar Gugava and Prof Givi Papava, a Project Proposal #6309 entitled “**Biodegradable Polymers Synthesis and Application in Environment Protection from Pollution**” has been submitted recently to STC Science and Technology Center in Ukraine.

This project follows up the one on “**New Generation Nitrogen Fertilizers**” with Prof Givi Papava (2012).



Marc J.M. Abadie
Professor Emeritus

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