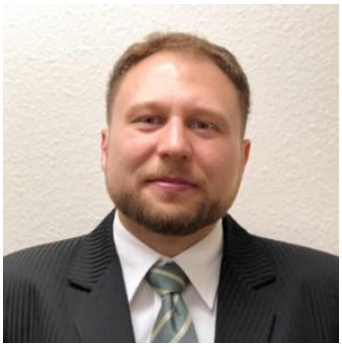

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2007-2012 – PhD in Chemistry – **PhD thesis title**: "Hybrid materials based on silicones and lignocellulose derivatives", School of Advanced Studies of the Romanian Academy, "Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania; PhD Coordinator: Dr. Bogdan C. Simionescu;
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- 2007 – 2015, 2019 – present, researcher at "Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania;
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Scientific contributions: 29 articles published in ISI journals, **8** oral presentations at international conferences, **2** at national conferences, **3** patents.
Member in **9 projects**:

1) New mechanisms and concepts for exploiting electroactive Polymers for Wave Energy Conversion, PolyWEC, www.polywec.org;
2) Eco innovative technologies for Platinic Group metals recovery from scrapped catalyst– ECOTECH-GM, http://www.3nanosae.org/ecotech-gmp-en/;
3) Metal-organic frameworks with hydrophobicity fine-tuned by using silicones chemistry, http://silmofs.icmpp.ro/;
4) Thermocomfort Cloth Inspired by Squid Skin, grant from U.S. Advanced Research Projects Agency–Energy (cooperative agreement DE-AR0000534), https://arpa-e.energy.gov/?q=slick-sheet-project/thermocomfort-cloth
5) Silicone-based energy conversion units built up by green chemistry, http://greenergy.icmpp.ro;
6) Synthesis and study of the polymeric metallosiloxanes - new materials for catalysis and nanosciences, http://polisilmet.icmpp.ro/en/index.html;

7) Development of processes and components based on oxidic and polymeric thin layers for transparent electronics and optoelectronics, https://www.imt.ro/ELOTRANSP/obiective.php;
8) Modelare si conducere automata utilizand instrumente ale inteligentei artificiale pentru aplicatii in chimie si inginerie de process, http://iit.academiaromana-is.ro/grant/intelchim.pdf;
9) Siloxane-Based Compounds as Precursors for Nanomaterials, https://icmpp.ro/intranet/grant_files/CompusiSiloxaniciEN.pdf;
10) Multifunctional nanostructured silicone materials,
11) http s://icmpp.ro/grants/Maria%20Cazacu/Web_NANOSIMAT_engl_2009.pdf.

Scientific visibility:
H-index: 11 (Web of Science Core Collection); **11** SCOPUS; **12** (Google Scholar)
Sum of times cited: 259 (Web of Science Core Collection); **273** SCOPUS; **303** (Google Scholar)
Achievements:
Internships:

- COST Action, ESNAM Training School: Training School on Ionic Artificial Muscles, 29-31 October 2019, Universidad Politecnica de Cartagena/Spain.
- COST Action, ESNAM Training School on Dielectric Elastomers, 25-27 March 2014,
- Darmstadt, Germany.
- EuroEAP Short Term Scientific Mission (STSM): Testing new materials with improved dielectric breakdown strength and reduced current leakage, 16.11.2012-14.12.2012, 27.09 – 12.10.2013, PERCO laboratory for soft robotics, Scuola Superiore Sant'Anna/Italy.

Training courses:

- "Activate to Captivate, Communications and Cultural Fluency Public Speaking Course", January 19, 2017 – March 7, 2017
- "SciPhD. The Business of Science: Applying the Scientific Method to Succeed in Diverse Industries", September 8-23, 2017
- "SBIR Road Tour & UCI Applied Innovation", September 12, 2017, organized by University of California Irvine.

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2) Chengyi, X.; Stiubianu, G.; Gorodetsky, A. A. Adaptive infrared-reflecting systems inspired by cephalopods, *Science* (IF 41.037), **Mar 2018**, *6383*, 1495-1500.
3) Bele, A.; Tugui, C.; Sacarescu, L.; Iacob, M.; Stiubianu, G.; Dascalu, M.; Racles, C.; Cazacu, M. Ceramic nanotubes-based elastomer composites for applications in electromechanical transducers, *Mater. Des.* (IF 5.77), **Mar 2018**, 120-131.
4) Iacob, M.; Racles, C.; Tugui, C.; Stiubianu, G.; Bele, A.; Sacarescu, L.; Timpu, D.; Cazacu, M. From iron coordination compounds to metal oxide nanoparticles, *Beilstein J. Nanotechnol.* (IF 2.968), **Dec 2016**, *1*, 2074-2087.
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7) Bele, A.; Stiubianu, G.; Vlad, S.; Tugui, C.; Varganici, C.-D.; Matricala, A.-L.; Cazacu, M. Aging behavior of the silicone dielectric elastomers in simulated marine environment, *RSC Adv.* (IF 3.049), **Jan 2016**, *11*, 8941-8955.
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9) Bele, A.; Stiubianu, G.; Varganici, C.-D.; Ignat, M.; Cazacu, M. Silicone dielectric elastomers based on radical crosslinked high molecular weight polydimethylsiloxane co-filled with silica and barium titanate, *J. Mater. Sci.* (IF 3.442), **Oct 2015**, *20*, 6822-6832.
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11) Tugui, C.; Stiubianu, G.; Iacob, M.; Ursu, C.; Bele, A.; Vlad, S.; Cazacu, M. Bimodal silicone interpenetrating networks sequentially built as electroactive dielectric elastomers, *J. Mater. Chem. C* (IF 6.641), **Jul 2015**, *3*, 8963-8969.
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1) Contributions to Recent Developments in Silicone Materials: Dielectric Elastomer Transducers (DETs); M. Cazacu, C. Tugui, A. Bele, G. Stiubianu, M. Dascalu, C. Racles; 21st Romanian International Conference on Chemistry and Chemical Engineering, 4-7 September, **2019**, Constanta, Romania.
2) Bimodal silicone networks as dielectric elastomers, C. Tugui, M. Iacob, G. Stiubianu, C. Ursu, C.D. Varganici, M. Cazacu; 5th international conference on Electromechanically Active Polymer (EAP) transducers & artificial muscles; 9-10 June, **2015**, Tallinn, Estonia.
3) Managing silicone electromechanical properties through inorganic nanoparticles fillers, M. Iacob, G. Stiubianu, C. Tugui, A. Bele, M. Cazacu; World Renewable, Energy Congress XIV, 8-12 June, **2015**, Bucharest, Romania.

4) Dielectric elastomers transducers as medical devices; C. Tugui, C. Ursu, M. Aflori, G. Stiubianu, M. Iacob, A. Bele, X. Patras, M. Cazacu; Congresul International al Universitatii "Apollonia" Editia a XXV-A; 26 February – 1 March, **2014**, Iasi, Romania.
5) „Improving the dielectric properties of silicones by incorporation of ceramic nanoparticles", George Stiubianu, Adrian Bele, Carmen Racles, Maria Cazacu, STREAM Summer School, Iasi 8-12 Iulie **2013.**
6) "New materials developed based on cellulose and siloxane derivates. Preparation and properties Evaluation", George Stiubianu, Cristian Grigoraş, Carmen Racleş, Maria Cazacu, The 6th Edition of International Conference on Materials Science & Engineering, BRAMAT Conference **2009**.
7) "Evaluation of the Water Sorption Capacity of Some Polymeric Materials by Dynamic Vapour Sorption", Alexandra Nistor, George Stiubianu, Carmen Racleş, Maria Cazacu, The 6th Edition of International Conference on Materials Science & Engineering, BRAMAT Conference **2009**.
8) CEI SPRING WORKSHOP FOR YOUNG RESEARCHERS, THE SEVENTH FRAMEWORK PROGRAMME (FP7), George Stiubianu, Polonia, Poznan 6 – 12 April **2008**.

List of patents

1) Maria Cazacu, **George Stiubianu**, Procedeu de obţinere a unui cauciuc siliconic cu vulcanizare la temperatura camerei folosind lignina ca material de umplutura (Procedure for obtaining a silicone rubber with room temperature vulcanisation using lignin as filler material). Patent No 126477 was approved (March 29, 2013) and published in: BULETINUL OFICIAL DE PROPRIETATE INDUSTRIALA – SECȚIUNEA INVENȚII nr. 3/2013 (Romania, Europe).
2) Alon A. Gorodetsky, Steven Jim, **George Stiubianu**, Erica Leung, Kyle Naughton, Priyam Patel, Maurizio Follador, Emil Karshalev, Disclosure and record of invention: "Composite Materials with Adjustable Spectral Properties", UC Case No. 2017-802-1, July 18, 2017, "S" No. 143136.
3) Alon A. Gorodetsky, Chengyi Xu, **George Stiubianu**, Disclosure and record of invention: "Adaptive Infrared-Reflecting Systems", UC Case No. 2018-242-1, February 9, 2018, "S" No. T-117384.