IUSTINIAN GABRIEL BEJAN **Curriculum vitae**

Locul si data naȘterii: Vaslui, Romania, 25 October 1975
Adresa: Iasi, Romania
Contact: e-mail: iustinian.bejan@uaic.ro
Status: casatorit, 1 copil

Educatia universitara:

07/2001–04/2007	**Ph.D.**, Chimie, University of Wuppertal, Germany, absolvit cu "magna cum laude" - Teza: Investigations on the Gas Phase Atmospheric Chemistry of Nitrophenols and Catechols" Conducator: Prof. Dr. Karl Heinz Becker/ Dr. Ian Barnes
09/1999–05/2001	**M.Sc.** "Chimia solidelor", modul francofon, University of Iasi, Facultatea de Chimie, absolvit cu nota 10; Teza: Heavy metals pollution using moss as biomonitors, Conducator: Prof. Dr. Raluca Mocanu
09/1995–06/1999	**B.Sc.**, University of Iasi, Facultatea de Chimie, Iasi, Romania

Experienta profesionala:

09/2015–	Cercetator Stiintific III, Universitatea "Al. I. Cuza" Iasi, Integrated Centre of Environmental Science Studies in the North East Region, Romania
07/2013–07/2015	Bursa postdoctorala Marie Curie IEF > 10 ani experienta, Universitatea Leeds, Marea Britanie
08/2010–07/2013	Postdoctorat, Universitatea Wuppertal, Germania
08/2008–08/2010	Bursa postdoctorala IRCSET, Universitatea Cork, Irlanda
06/2001–07/2008	Asistent cercetare doctorat, Universitatea Wuppertal, Germania
09/1999–05/2001	Asistent cercetare doctorat, Chimie Analitica, Universitatea Iasi, Romania
09/1999–05/2001	Profesor Liceu – disciplina Fizica

Performante profesionale:

Marie Curie IEF bursa postdoctorala > 10 ani experienta, 07/2013–07/2015 (competitie 16% rata de succes; ~300 000EUR)
IRCSET (Irish Research Council for Science Engineering and Technology) bursa postdoctorala 08/2008–07/2010 (competitie 10-15 % rata de succes; ~78 960EUR)

Training-uri:

May 2014	Curs de training: Data Acquisition using LabView program;
Feb 2010	Compact curs intensiv pentru utilizarea programului de modelare MCM, folosind platforma online AtChem, Universitatea Leeds, Marea Britanie;
Feb 2008	Stagiu de pregatire - Compact Curs "Chemische Probleme auf dem Gebiet des Umweltschutzes. Schwerpunktthema: Antropogen verursachter Klimawandel", Universitatea Bochum, Germania
Feb 2007	Stagiu de pregatire - Compact Curs "Chemische Probleme auf dem Gebiet des Umweltschutzes. Schwerpunktthema: Landwirtschaft und Umweltschutz", Universitatea Bochum, Germania

Aug-Sep 2006 Scoala de vara: “Climate effects of secondary organic aerosol” – CESAR, Forschungszentrum Jülich, ICG-II, Germania,

Feb 2006 Stagiu de pregatire - Compact Curs “Chemische Probleme auf dem Gebiet des Umweltschutzes. Schwerpunktthema: CAFE – Europaeische Luftreinhaltung im Wandel”, Universitatea Bochum, Germania,

Feb 2005 Stagiu de pregatire - Compact Curs “Chemische Probleme auf dem Gebiet des Umweltschutzes. Schwerpunktthema: POP und CO: chemische Gefahrstoffe in der Umwelt”, Universitatea Bochum, Germania,

Oct 2004 Compact curs intensiv “Atmospherische Chemie und Dynamik”, Forschungzentrum Juelich, Germania,

Feb 2004 Stagiu de pregatire - Compact Curs “Chemische Probleme auf dem Gebiet des Umweltschutzes. Schwerpunktthema: Partikel in der Umwelt”, Universitatea Bochum, Germania,

Limbi cunoscute:

Romana (nativ); engleza (foarte bine); Germana (bine); franceza (bine).

Referent ştiintific/Reviewer:

Chemical Physics Letters, Environmental Science and Technology, International Journal of Chemical Kinetics, Atmospheric Environment, Physical Chemistry Chemical Physics, Atmospheric Measurements Techniques,

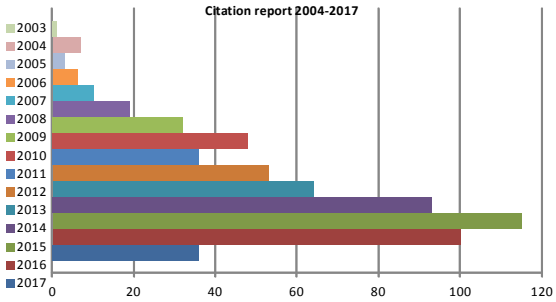
Membru asociatii profesionale:

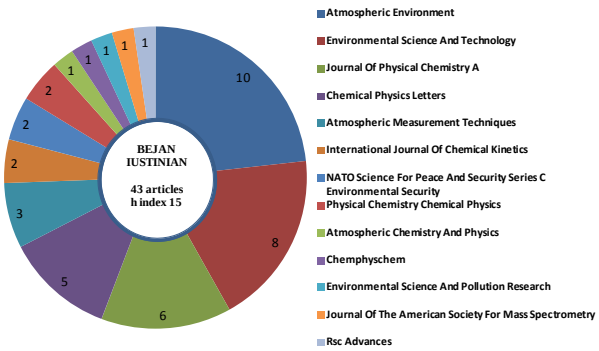
Membru al Royal Society of Chemistry din 2013

Membru al Societatii Romane de Chimie din 2015

Experienta in cercetare: (vizibila pe www.scopus.com; www.ResearchGate.net)

(*h* index = 15 (13 dupa excluderea autocitarilor); RG score = 31.40; articles = 43; citari (excluded self citation) = 565; > 15 proceedings and book chapters; > 14 oral presentations; > 90 posters; 6 invited lectures





Participari la conferinte ca invitat

1. Iustinian Bejan, Investigations on the gas-phase chemistry of some selected nitroaromatic hydrocarbons. Invited Lecture at Faculty of Chemical Sciences, University National of Cordoba, 2007, 24 October, in cadrul programului PROALAR.
2. Iustinian Bejan, Phenoxy-Type Radical Formation from the Oxidation of Phenolic-Type Compounds - Investigations on Nitrophenols, Atmospheric Chemical Mechanisms, 2008, 10-12 December, Davis, USA
3. Iustinian Bejan, A new gas phase source of HONO: ortho-nitrosubstituted alkyl benzenes photolysis. Invited expert workshop. Nitrous acid: Tropospheric Chemistry , Measurement Methods and Future Directions, 2008, 3-5 March, Wuppertal, Germany
4. Iustinian Bejan, The Photolysis of Different Nitroaromatics: A daytime Source of HONO, Atmospheric Chemical Mechanisms, 2010, 10-12 December, Davis, USA
5. Iustinian Bejan, Gas Phase Nitrous acid Sources from Photolytic Processes: Nitroaromatics, 10th Workshop in the Series "Urban Air Quality and Traffic" Atmospheric Composition and Processes in Contrasting Environments, 2011, 19-21 September, Cork, Ireland
6. Iustinian Bejan, New investigations on the gas phase reactions important for atmosphere, Faculty of Chemistry Conference, 2014, October 31 – November 01, Iasi, Romania

Proiecte de cercetare internationale/nationale

Investigator principal

1. Contract Marie Curie IntraEuropean Fellowship (IEF) LAMUNIO-LAboratory and Modelling studies to UNderstand Isoprene Oxidation. Grant 331806. Perioada: July 2013-July2015, Valoare totală: 247388.16 EUR.
2. Contract IRCSET Fellowship Irish Research Council for Science, Engineering & Technology (IRCSET), Atmospheric Chemistry of Oxgenated Aromatic Compounds: Mechanisms & Aerosols, 1st Aug 2008-31st July 2010, Valoare totală: 83095.00 EUR.
3. Contract PN-II-RU-TE-2014-4-2461, nr. 305 din 01/10/2015, STUDII PRIVIND OXIDAREA COMPUȘILOR AROMATICI SUBSTITUIȚI ÎN CONDIȚII DE ATMOSFERĂ SIMULATĂ – SOS-AROMATIC, 01 Octombrie 2015- 30 Septembrie 2017, Valoare totală: **550000 LEI**
4. Contract PN-III-P2-2.1-PED-2016-1621 nr. 86PED din 03/01/2017, CAMERA DE SIMULARE ATMOSFERICĂ – NOU INSTRUMENT DE CERCETARE PENTRU INȚELEGEREA OXIDĂRII SESQUITERPENELOR – CHARUSO, 03 Ianuarie 2017 – 02 Iulie 2018, Valoare totală: 60**0000 LEI**

Membru in proiecte internationale/nationale

5. Ozonoliza compusilor oxigenati nesaturati de natura biogena in Atmosfera: de la cinetica la formarea aerosolilor organici secundari, OzOA, Bilateral Franta,
6. Contract PN-III-P2-2.1-PED-2016-0924 nr. 78PED din 03/01/2017,
7. European Union's Horizon 2020 research and innovation programme - EUROCHAMP-2020 grant agreement No 730997.
8. German Research Foundation (DFG) project POXSA (BE 2124/4-1) for development of new ionization technique for nitroaromatic detection using mass spectrometry.
9. DFG project "Kinetic and mechanistic investigations of the gas phase photolysis of ortho-substituted nitroaromatics KL1392/2-1.
10. TOXIC project "Toluene Oxidation Investigations in a Chamber".
11. DFG (German Research Foundation) project for the development of Ozone-LOPAP instrument.

12. DBU (German Environment Foundation) project for the development of NO2-LOPAP instrument contract No. 24171.
13. DAAD (German Academic Exchange Service) project, Germany - Argentinien, PROALAR 2007.
14. EU project: “Multiphase chemistry of oxygenated species in the troposphere” (Joint project MOST, (no° EVK2-CT-2001-00114).
15. BMBF project of the German Atmospheric Research Programme AFO 2000 “Regional biogenic emissions of reactive volatile organic compounds (BVOC) from forests: Process studies, modelling and validation experiments (BEWA2000)” (no° FZK – 07ATF25) subproject 201 “Laboratory and Smog Chamber Experiments on the Atmospheric Degradation of Biogenic VOC: Investigation of the Aerosol Formation and Validation of Chemical Mechanisms” (BEWA).
16. EU project: “Origin and formation of secondary organic aerosol” (Joint project OSOA, (no° EVK2-1999-00016).
17. BMBF project of the German Atmospheric Research Programme AFO 2000: “Validation of chemical mechanisms to describe the degradation of isoprene and a-pinene within 3-dimensional chemistry transport models” (Joint project ValCheM (no° FZK – 07ATF13).
18. EU project “Effects of the oXidation of Aromatic Compounds in the Troposphere (EXACT)” (no° EVK4 – CT1999 - 00053974064).

<u>Abilitati tehnice:</u>

- operarea camerelor de reactie construite din diferite materiale si de diferite volume, atat interioare 10L, 405L, 480L, 760L, 1080L, 2250L si 3900L cat si exterioare 200 m^3 (EUPHORE).
- dezvolatarea si operarea unui sistem de tub de reactie in flux dinamic.
- deprinderi de sampling al fazei gazoase si particulate pe sistem de denudere si filtre.
- operarea tehnicilor cromatografice GC-FID, GC-PID, GC-ECD si GC-MS pentru cunatificari si identificari de compusi in faza gazoasa.
- folosirea tehnicilor spectroanalitice FTIR cu drum optic marit in sistem White cat si in sistem Chernin.
- utilizarea tehnicilor de spectroscopie de absorptie atomica in flacara si a tehnicilor spectrofotometrice UV-VIS
- utilizarea spectrometriei de masa cu transfer de protoni pentru identificarea compusilor volatili din matrici gazoase.
- utilizarea monitoarelor de detectie a HONO, NO_2 si O_3 de tip LOPAP (Long Path Absorption Spectroscopy). Contributii la dezvoltarea unor astfel de instrumente.
- utilizarea instrumentelor de analiza a particulelor de aerosoli prin scanarea mobilitatii lor (SMPS, UCPC).
- operarea cu diferite monitoare de O_3, NO_2, NO, CO.
- utilizarea generatoarelor de ozon si a nebulizatoarelor de aerosoli.
- folosirea tehnicilor de preparare, extractie, derivatizare si masurare a probelor de gaz si ale celor particulate.
- interpretarea si evaluarea rezultatelor folosind o paleta larga de pachete de software specific instrumentelor de analiza.
- contributii la dezvoltarea unor noi metode de ionizare pentru instrumentele de spectrometrie de masa (APECI) - Atmospheric Pressure Electron Capture Ionization.
- contributii la dezvoltarea unui instrument de masurare a radicalilor OH si HO_2 prin tehnici de fluorescenta indusa laser. Fluorescence Assay by Gas Expansion (FAGE).

Alte aptitudini si competente

Coordonare activitate de laborator in laboratorele universitatilor din Wuppertal, Cork si Leeds. Investigator principal in proiectele de cercetare Marie Curie si IRCSET

Coordonarea experimentelor de laborator si a partii de evaluare a investigatiilor efectuate in cadrul diferitelor teze de master si doctorat. Dr. Maria Belen Blanco (Argentina), Dr. Antonio Ceacero Vega (Spain), Dr. Amelie Lauraguais (France); PhD student Rodrigo Gibilisco (Argentina); Dr. Hiroshi Tsurumaru (Japan), MS Jamie Kelly (United Kingdom) (see publications list)

Experienta didactica:

Laboratoare si seminarii - University of Wuppertal, Germany, Physical-Chemistry Department

- Thermodynamics I and II
- Kinetics
- Structure of Matter and Spectroscopy

Laboratoare si seminarii - University of Iasi, Romania, Analytical-Chemistry Department,

- Chimia Analitica Cantitativa si Calitativa.
- Capitole Speciale de Analiza Instrumentala.
- Analiza Instrumentala – Analiza de Urme.

Mai, 2017

Dr. chim. Iustinian Gabriel BEJAN