

**Locul si data nasterii:** Vaslui, Romania, 25 October 1975  
**Adresa:** 28 Old Oak Drive, LS16 5HB, Leeds, United Kingdom  
**Contact:** e-mail: I.G.Bejan@leeds.ac.uk  
**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:**

07/2013–07/2015 Bursa doctorala 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 Stagiul de pregătire - Compact Curs "Chemische Probleme auf dem Gebiet des Umweltschutzes. Schwerpunktthema: CAFE – Europäische Luftreinhaltung im Wandel", Universitatea Bochum, Germania,

Feb 2005 Stagiul de pregătire - 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 "Atmosphärische Chemie und Dynamik", Forschungszentrum Jülich, Germania,

Feb 2004 Stagiul de pregătire - 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 (satisfactor).

### **Referent științific/Reviewer:**

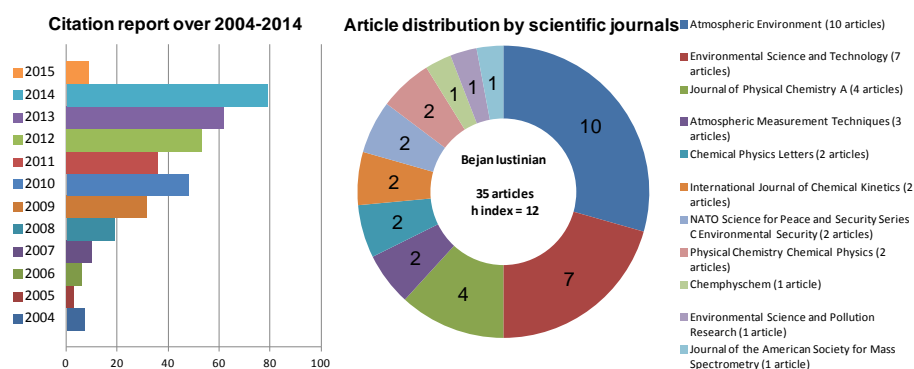
Chemical Physics Letters, Environmental Science and Technology, International Journal of Chemical Kinetics, Atmospheric Environment, Physical Chemistry and Chemical Physics.

### **Membru asociații profesionale:**

Membru al Royal Society of Chemistry din 2013

### **Experiența în cercetare:** (vizibilă pe [www.scopus.com](http://www.scopus.com); [www.ResearchGate.net](http://www.ResearchGate.net))

(*h* index = 12 (10 după excluderea autocitațiilor); RG score = 31.40; articole = 35; citări (excluzând citarea proprie) = 355; > 15 proceedings and book chapters; > 10 oral presentations; > 90 posters; 6 invited lectures



### **Participări la conferințe 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, 10<sup>th</sup> 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 Oxygenated Aromatic Compounds: Mechanisms & Aerosols, 1st Aug 2008-31st July 2010, Valoare totală: 83095.00 EUR.

#### **Membru in proiecte internationale/nationale**

3. German Research Foundation (DFG) project POXSA (BE 2124/4-1) for development of new ionization technique for nitroaromatic detection using mass spectrometry.
4. DFG project “Kinetic and mechanistic investigations of the gas phase photolysis of ortho-substituted nitroaromatics KL1392/2-1.
5. TOXIC project “Toluene Oxidation Investigations in a Chamber”.
6. DFG (German Research Foundation) project for the development of Ozone-LOPAP instrument.
7. DBU (German Environment Foundation) project for the development of NO<sub>2</sub>-LOPAP instrument contract No. 24171.
8. DAAD (German Academic Exchange Service) project, Germany - Argentinien, PROALAR 2007.
9. EU project: “Multiphase chemistry of oxygenated species in the troposphere” (Joint project MOST, (no° EVK2-CT-2001-00114).
10. 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).
11. EU project: “Origin and formation of secondary organic aerosol” (Joint project OSOA, (no° EVK2-1999-00016).
12. BMBF project of the German Atmospheric Research Programme AFO 2000: “Validation of chemical mechanisms to describe the degradation of isoprene and  $\alpha$ -pinene within 3-dimensional chemistry transport models” (Joint project ValCheM (no° FZK – 07ATF13).
13. EU project “Effects of the oXidation of Aromatic Compounds in the Troposphere (EXACT)” (no° EVK4 – CT1999 - 00053974064).

### **Abilitati tehnice:**

- operarea camerelor de reactie construite din diferite materiale si de diferite volume, atat interioare 10L, 405L, 480L, 1080L, 2250L si 3900L cat si exterioare 200 m<sup>3</sup> (EUPHORE).
- dezvoltarea si operarea unui sistem de tub de reactie in flux dinamic.
- deprinderi de sampling al fazei gazoase si particulate pe sistem de denudare 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<sub>2</sub> si O<sub>3</sub> 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<sub>3</sub>, NO<sub>2</sub>, 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<sub>2</sub> prin tehnici de fluorescenta indusa laser. Fluorescence Assay by Gas Expansion (FAGE).

### **Alte aptitudini si competente**

Coordonare activitate de laborator in laboratoarele 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 ale 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.
- Capitale Speciale de Analiza Instrumentala.
- Analiza Instrumentala – Analiza de Urme.

**Mai, 2015**

**Dr. chim. Iustinian Gabriel BEJAN**