



Nicola Bonora

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WORK EXPERIENCE

Department Head

University of Cassino and Southern Lazio [01/11/2018 – Current]

City: Cassino | Country: Italy

The Department Head is responsible for administering an academic department which includes and is not limited to, faculty recruitment and development, faculty evaluation, research development and review, curriculum development, student advisement, departmental budgeting and budget control, class schedule planning, and general supervision of the teaching, research, and service and related scholarly activities of the department.

Full Professor

University of Cassino and Southern Lazio [02/01/2005]

City: Cassino | Country: Italy

Leading and directing research in a specific field, writing research proposals, establishing relationships with industrial and research institutions, applying the scientific method to all disciplines within their field, building a course curriculum, mentoring students, presenting lectures, presenting and publishing research.

Internal Researcher

Battelle Memorial Institute [02/01/1992 – 02/02/1994]

City: Columbus | Country: United States

Internal Researcher at Mechanical Department, structural integrity analyst, fracture and damage analyses, writing technical reports, developing computational tools.

Visiting scientist - NRC Research Associateship Programs (RAP)

The National Academies of Science [01/05/2004 – 01/10/2004]

City: Eglin AFB | Country: United States

The NRC Research Associateship Programs (RAP) promote excellence in scientific and technological research conducted by the U.S. government through the administration of programs offering graduate, postdoctoral, and senior level research opportunities at sponsoring federal laboratories and affiliated institutions.

As senior level researcher, I was hosted by the AFRL Munitions Directorate at Eglin AFB under the direct supervision of Chief Scientist Robert L. Sierakowski. My duty was to develop research in the field of ductile damage in dense metals, to write technical notes for the Chief Scientist, to participate in technical meetings.

Associate Professor

University of Cassino and Southern Lazio [02/11/2000 – 02/01/2005]

City: Cassino | Country: Italy

Leading and directing research in a specific field, writing research proposals, establishing relationships with industrial and research institutions, applying the scientific method to all disciplines within their field, building a course curriculum, mentoring students, presenting lectures, presenting and publishing research.

Technical Advisor

Defense General Staff Military Center for Strategic Studies (CEMISS) [01/01/2002 – 01/01/2005]

City: Rome | Country: Italy

Writing technical reports and strategic analyses on specific issues of military interest.

Assistant Professor - Researcher

University of Cassino and Southern Lazio [02/01/1996 – 02/11/2000]

City: Cassino | Country: Italy

Writing research proposals, applying the scientific method to all disciplines within their field, building a course curriculum, mentoring students, presenting lectures, presenting and publishing research.

Research Associate

Wayne State University [02/01/1994 – 01/01/1995]

City: Detroit | Country: United States

Leading laboratory activities under the supervision of Prof. Golam Newaz, writing research proposals, mentoring Ph.D. students, presenting and publishing research results

EDUCATION AND TRAINING

Ph.D. in Aerospace Engineering

University of Rome La Sapienza [02/11/1990 – 02/11/1993]

Address: Via Antonio Scarpa, 14, 00161 Rome (Italy) | Website: <https://www.ing.uniroma1.it/>

Master's Degree in Aeronautical Engineering

University of Rome La Sapienza [02/11/1985 – 25/07/1990]

Address: Via Antonio Scarpa, 14, 00161 Rome (Italy) | Website: <https://www.ing.uniroma1.it/>

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING C2 READING C2 WRITING C2

SPOKEN PRODUCTION C2 SPOKEN INTERACTION C2

French

LISTENING A1 READING A1 WRITING A1

SPOKEN PRODUCTION A1 SPOKEN INTERACTION A1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Microsoft Office / Microsoft Word / Microsoft Excel / Google Drive / Social Media / Internet user / Decision-making / Microsoft Powerpoint / curious / Good listener and communicator / E-mail use / Finite element analysis / HTML / Fortran

MANAGEMENT AND LEADERSHIP SKILLS

Research Project Coordinator (P.I.) I conceived and led several national and international research projects with competitive calls (EU, Air Force National Laboratory (AFRL), Italian Ministry of Defense, and regional government). These projects were in many cases multinationals, with partners from industry, academic institutions, and government labs.

CEO of Techdyn Engineering 2011 - current. Co-founder and CEO of Techdyn Engineering - an academic spin-off company of the University of Cassino and Southern Lazio - a research and technology firm with expertise in modeling and simulation of materials behavior in engineering processes as applied in industry.

Link: www.techdyn.it

Laboratory Director From 2005-2017. Laboratory Director of Mechanical Engineering Lab at the University of Cassino and Scientific and Technology Park of Southern Lazio (PALMER). Planning, organizing, directing, and coordinating a range of experimental activities in the lab, performing administrative duties, supervising and assisting other staff members, overseeing tests and experiments and presenting the results to clients, and ensuring that all tests and projects are completed on time.

Scientific Coordinator From 2015-2020. Scientific Coordinator of the Italian Scientific Society of Mechanical Engineering Design (AIAS - Società Scientifica Italiana di Progettazione Meccanica e Costruzione di Macchine). Planning and promoting the activities of the society, managing the society website, coordinating the activities of the society topical groups, supporting the organization of the Ph.D. Summer school and annual conference.

Link: www.iasnet.it

Project Evaluator Evaluator of UE projects (H2020) , PRIN (Progetti di Rilevante Interesse Nazionale), project funded by regional governments (Regione Lazio, Campania, Toscana, Emilia Romagna), the Polish Academy of Science.

ORGANISATIONAL SKILLS

Department Head From 2018 - ongoing. As Department Head, I was responsible for administering the Civil and Mechanical Department of the University of Cassino (56 faculty and 15 administrative staff units) including faculty recruitment and career development, faculty evaluation, promoting and reviewing research, curriculum development, departmental budgeting, and budget control. The Department Head is a member of the University Senate and refers directly to the Rector for university policy development and implementation.

Member of the University Board of Directors (Trustees) From 2008-2012 and From 2015-2018. As a member, I was responsible for developing and approving the university mission, strategic goals and objectives, and establishing policies related to programs and services

Conference organization Organizer of several national and international conferences and conference special session developer.

Associate Editor 2014 - current. Associate Technical Editor of Journal of Dynamic Behavior of Materials, Springer. ISSN 2199-7454

2007 - current. Associate Technical Editor of Frattura ed Integrità Strutturale, ISSN 1971-8993

NETWORKS AND MEMBERSHIPS

[01/09/2023 – Current]

AIAS President President of the Italian Scientific Society of Mechanical Engineerign Design (AIAS)

[01/09/2020 – 30/08/2023] Italy

AIAS Vice President Vice President of the Italian Scientific Society of Mechanical Engineerign Design (AIAS)

Link: www.aiasnet.it

[01/02/2018 – Current] Bruxelles

European Defence Agency - CapTech Material & Structures CnGES - CapTech non governmental expert (academia). Contributing, as an expert, to CapTech discussions and activities.

[02/01/2000 – Current] USA

Member of the Americal Physical Society (APS)

HONOURS AND AWARDS

Stanford University/Elsevier

2023 Top 2% Most Influential Scientists Recognized in the top 100,000 scientists by c-score or a percentile rank of 2% or above in the sub-field.

[02/05/2023] Society for Experimental Mechanics (SEM)

2023 R. E. Peterson Best Paper Award For the outstanding paper entitled "On The Role of Constitutive Modeling and Computational Parameters in the Numerical Simulation of Dynamic Tensile Extrusion Test" published in the Journal of Dynamic Behavior of Materials 8, 453–472 (2022) by S. Ricci, G. Testa, G. Iannitti, A. Ruggiero and N. Bonora.

[01/01/2005] MSC Software

MSC2015 SIMULATING REALITY CONTEST Top 3 Winner of the 2015 Simulating Reality Contest Category: Industry Team

[01/10/2015] MBDA Italia

MBDA "IDEA" AWARD MBDA Innovation Award for research and development in emerging enabling technologies for missile applications

[07/07/2013] American Society of Mechanical Engineers

ASME Best Paper Award Pressure Vessel and Piping Conference Best Paper Award – Co-author

[10/10/2012] MBDA Italia

"ONE STAR " MBDA AWARD MBDA Innovation Award for the innovative contribution made to the design to integrity structure of missile ceramic radomes

[01/10/2009] MSC Software

MSC EMEA VPD AWARD Innovative Collaboration Award

[01/02/2004] The National Academy of Science

National Academy of Science - NRC Associateship (Fellowship) Fellowship at US Air Force, Munitions Directorate, Eglin AFB.

[01/02/1999] EOARD/AFRL

WINDOW ON SCIENCE PROGRAM Recipient Invited Lecturer at US Air Force Research Laboratory: Eglin AFB, FL. USA, Wright-Patterson AFB, OH. USA, Kirtland, AFB, NM USA.

[09/09/1996] AIAS

PREMIO AIAS "CAPOCACCIA" Best conference paper in the field of stress analysis

CONFERENCES AND SEMINARS

[25/05/1997 – 28/05/1997] University of Cassino, Cassino, Italy

Italian Group of Fracture Conference, Cassino (IT) XIII Annual Conference. Conference organizer and conference proceedings editor.

[02/09/2008 – 04/09/2008] Palazzo Bo, Venice

Symposium on Advances in Composites and layered materials Sponsored by EOARD/AFRL. Conference organizer and conference proceedings editor

[26/06/2011 – 01/07/2011] Chicago, IL USA

SCCM Biennial International Conference of the American Physical Society Topical Group on Shock Compression of Condensed Matter Conference - Poster Session Organizer and proceedings co-editor. Poster Session Organizer and proceedings co-editor

[20/07/2014 – 24/07/2014] Anaheim, California, USA

Pressure Vessels and Piping Conference (46032) Session organizer, Chair

[11/03/2015 – 15/03/2015] Orlando, FL, USA

TMS 2012 Annual Meeting & Exhibition Session organizer, Chair

AIAS Conference series 47th AIAS Conference, 5-8 SEP 2018, Villa S. Giovanni, Italy, Conference co-organizer and conference proceedings co-editor.

48th AIAS Conference, 4-7 SEP 2019, Perugia, Italy, Conference co-organizer and conference proceedings co-editor.

49th AIAS Conference - Virtual 2020, Conference organizer and conference proceedings editor.

50th AIAS Conference - Virtual 2021, Conference co-organizer and conference proceedings co-editor.

[27/02/2023 – 03/03/2023] Orlando (FL), USA

TMS 2023 Annual Meeting & Exhibition Session Organizer

PUBLICATIONS

[01/06/1991 – Current]

Publications

Author of 140 indexed papers, h-index: 22, num. citations: 2240 (Source: SCOPUS)

Published book: Nuove Prospettive per l'Aeronave, N.Bonora, Ed. Rubbettino, Centro militare studi strategici, pp. 131, ISBN:

9788849810424