

## Dr. Antonio Rinaldi

ENEA, CR Casaccia  
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## EDUCATION

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- 2004 Ph.D. Mechanical Engineering, Arizona State University, Tempe, AZ, USA
- 2004 Graduate Certificate Applied Statistics And Six Sigma, Arizona State University, Tempe, AZ, USA
- 2002 M.S. Mechanical Engineering, Arizona State University, Tempe, AZ, USA
- 2000 LAUREA summa cum laude (5 years) Mechanical Eng., University "La Sapienza", Rome, Italy

## CAREER

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- Since 2014 **R&D Director** Nanofaber srl, CR Casaccia, Rome, Italy
- Since 2010 **Scientist** in Materials, Department of Sustainability, ENEA, CR Casaccia, Rome, Italy
- 2012-2014 **Research Professor**, Director of LAMSI Lab (<http://memocs.univaq.it/>), Univ. L'Aquila, Italy
- 2007-2011 **Adjunct Professor**, Univ. Tor Vergata, Rome, Italy
- 2007-2010 **Researcher**, ISPESL (Italian Institute for safety and occupational health), Rome, Italy
- 2005-2006 **Research Professor**, Mech & Aeros. Eng. Dept, Arizona State University, Tempe, AZ, USA

## TEACHING

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- 2007-2011 In charge of "Materials technology and chemical science" (undergraduate and graduate) course, Faculty of Engineering, University of Tor Vergata, Rome, Italy
- July 2008 Invited Lecturer at short course "Damage Mechanics and Micromechanics of Localized Fracture Phenomena in Inelastic Solids", CISM, Udine, Italy
- 2002-2004 Teaching Assistant, senior undergraduate eng. courses, Arizona State University, USA

**Supervision of students.** Co-supervised of 6 PhD students, 5 Master/Bachelor students.

## PROJECTS & COORDINATION ACTIVITIES

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### RESEARCH PROJECTS:

- 2017-2020 Coordinator of HORIZON2020-NMBP17 "**NEXTOWER**" (6M€ contribution EC)
- 2016-2019 ENEA Responsible for HORIZON2020-FETOPEN "**ICARUS**" (350k€ contribution EC to ENEA)
- 2015-2018 ENEA Responsible for HORIZON2020-TWINNING "**SUPERMAT**" (128k€ to ENEA)
- 2010-2014 Recipient of the Italian Young Investigation Award 2010 (**FIRB**) "Ultra High Efficiency ZnO Nanogenerators" (260k€ grant by Ministry of Research and Education)
- 2012-2014 Co-leader and coordinator of POR-FESR EU CO-RESEARCH project "SIRE" (350k€)
- 2013-2014 Scientific Coordination of POR-FESR EU SPIN-OFF project "NANOFABER" (63k€)

### EDITORIAL PROJECTS:

- 2012-2014 Section Editor, "Handbook of Damage Mechanics", Ed. Voyadjis G., Springer NY
- 2009 Guest editor, Int. J. Damage Mech. (Vol. 18, 2009) special issue dedicated to D Krajcinovic.
- 2007 Guest editor, Int. J. Plasticity (Vol. 23, 2007), special issue dedicated to D Krajcinovic.

OTHER:

2017 – ongoing Cost Action CA15102 (extreme critical raw materials) management board substitute  
2015-2016 EERA-JPNM subprogram coordinator  
since 2014 Member elect of board of advisors of PROCOMP consortium (participated by ENEA )  
since 2009 ASSOINGE , Association of Italian Engineers Abroad, co-founder

## RESEARCH

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**INTERESTS.** Main research topics relevant to SP3 include: multiscale modelling, damage and fracture mechanics, creep (detection, modeling, and design), structural analysis and engineering, nuclear materials technology, experimental characterization of materials and processes, nanotechnology (e.g. nanomechanics, nanobiotechnology, nanometrology, micromachining and microfabrication techniques), microscopy (optical, SEM, AFM, SPM, FIB).

**PUBLICATIONS.** Co-authored more than 80 contributions (mostly as corresponding author) in “peer-reviewed” journals, “conference proceedings”, and books in several scientific areas, such as damage mechanics, nanomechanics, nanobiotechnology, renewable energy, microscopy.

- MAT, IJF, etc.