CURRICULUM VITAE

EUROPEAN FORMAT

PERSONAL INFORMATION

Name, Surname	**Julietta V. Rau = Dzhulietta Rau**
Address	Via Federico Patetta n° 93 – 00167 Roma
Telephone	~~+39 0649932 4086 (office)~~
Fax	~~+39 06 4993 4453~~
E-mail	giulietta.rau@ism.cnr.it
Website	https://biomah.ism.cnr.it http://www.ism.cnr.it/en/staff/julietta-rau/ http://orcid.org/0000-0002-7953-1853 https://scholar.google.it/citations?user=orvFyq4AAAAJ&hl=it https://www.webofscience.com/wos/author/record/E-6598-2017 https://www.researchgate.net/profile/Julietta_Rau
Citizenship	Italian

WORK EXPERIENCE

Present position: **From January 1st 2023**

QUALIFICATION **DIRECTOR OF RESEARCH**
ISM-CNR, Via del Fosso del Cavaliere, 100-00133 Roma

From October 30th 2020

QUALIFICATION **FIRST RESEARCHER**
ISM-CNR, Via del Fosso del Cavaliere, 100-00133 Roma

From October 16th 2012

N. MATRICOLA **14951**

	QUALIFICATION **RESEARCHER** **INSTITUTE OF THE STRUCTURE OF MATTER, ITALIAN NATIONAL RESEARCH COUNCIL** ISM-CNR, Via del Fosso del Cavaliere, 100-00133 Roma
Other contracts and positions Dates (from – to)	**2022-2025 Ambassador for Italy at the European Orthopaedic Research Society**

PROFESSIONAL EXPERIENCE:

From 01/03/2002 to 30/06/2003 - Visiting Professor
at the High Temperature Center (CNR, Rome, Italy), ASI Project (Italian Space Agency, No. 242).

From 01/12/1993 to 06/05/2005 - Researcher at the Physical Chemistry Division of the Chemistry Department of the Moscow State University.
"M.V. Lomonosov".

Invited Researcher (on leave from the Moscow State University):
1995 - the Institute of Physics of Mainz University **(Germany)**
1997, 1998 - "Josef Stefan" Institute in Ljubljana **(Slovenia)**
1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004 - the Chemistry Department of the University of Rome "La Sapienza" **(Italy)**
2001 - the Institute of the Structure of Matter, Council National Research (CNR), Rome **(Italy)**
2003 – the Chemistry Department of the University of Sheffield **(United Kingdom)**

Type of sector	**Biomaterials, Innovative Materials, New technologies for Healthcare, Photonics**
Present occupation or position held	**Head of the laboratory and Research Group "MATT INN" (Innovative Materials) at ISM-CNR**

National Scientific Qualification (ASN) for Full Professorship
(1st Tier / Fascia 1) Ministry of Education, Universities and Research (MIUR) | *Dec 2017 – Dec 2029*
Qualified as Full Professor in Academic Discipline 03/A2 (Model/Physical/General Chemistry) under the National Scientific Qualification framework (2016–2018 Call, 3rd Trimester).
https://asn16.cineca.it/pubblico/miur/esito-

abilitato/03%252FA2/1/3
Validity: from 05/12/2017 to 05/12/2029

Principal subjects occupational skills covered

Biomaterials for Healthcare: Design and Advanced Characterization Methods

- **In vitro and In vivo Testing:** Evaluation of material biocompatibility, performance, and biological response.
- **Specialized Applications:** Materials for craniofacial defect reconstruction, functional coatings, cranial implants, orthopedics, and dentistry.
- **Advanced Therapies:** Biomaterials tailored for regenerative medicine and tissue engineering applications.

Level in International Classification

H-index – 49 (Google Scholar)

Citations	**7219**
Index H	**49**
i10-index	**158**

Teaching and supervisor

Supervised numerous diploma theses for undergraduate and master's students, as well as PhD dissertations. Supervised international research fellowships and international PhD candidates.

Pubblications, Books and Articles

Authored
240 articles in high-impact international peer-reviewed journals,

1 book,

50 conference proceedings,

180 conference abstracts.

Holder of 2 patents.

Delivered 50 Invited, Keynote, and Plenary lectures at international conferences *(full list available upon request)*.

ADDITIONAL INFORMATION

MEMBERSHIP

Member of the Italian Society for Biomaterials since 2018
Honorary Member of the Romanian Society for Biomaterials since 2022
Member of the European Society for Biomaterials since 2022
Member of the Serbian Ceramic Society since 2022

International Advisory & Steering Roles

Scientific Leadership: Member of the International Scientific Committee and Advisory Board for **numerous international conferences** *(full list available upon request)*.

AWARDS

2026 The ARA Excellence Award – ARA 2026 given by **American Romanian ACADEMY of ARTS and SCIENCES July 1st, 2026 BRASHOV, ROMANIA**

2024 Excellence Award – RoMaT 2024 given at **10th International Conference on Materials Science and Technologies – RoMat 2024, November 14-15th, BUCHAREST, ROMANIA** awarded by National University of Science and Technology POLITEHNICA Bucarest, Faculty Materials Science and Engineering, Bucharest, Romania

2024 Special Award at ICIR EUROINVENT 2024 – 10 th edition of the International Conference on Innovative Research, Iasi, Romania, June 6-7, 2024

2022 Honorary Member Award awarded by the Romanian Society for Biomaterials July 2022, Bucharest, Romania

2022 Award "Ioana Csaki" awarded by the Romanian Society for Biomaterials
July 22, Bucharest, Romania

2021 Gold Premium Diploma at International Exhibition INVENTOR (IInd edition, 16-18.12.2021, Deva Romania
awarded for the International Patent RO134132 AO "Cobalt, Chromium and noble metal containing alloy used for manufacturing metal-ceramic dental prostheses, comprises Cobalt, Chromium, Silicon, Ruthenium, Zirconium and Silver" by
Antoniac Vasile Iulian, Rau Dzhulietta, Semenescu Augustin, Dawod Nazem, Geanta Victoras, Voiculescu Ionelia, Mates Ileana Mariana, Solea Marina Roxana

2021 Gold Premium Diploma at International Exhibition INVENTOR (IInd edition, 16-18.12.2021, Deva Romania
awarded for the International Patent RO134131 “Dental alloy of Cobalt-Chromium-Molybdenum type used for making metal-ceramic dental prostheses, comprises Cobalt, Chromium, Molybdenum, Silicon, Niobium, Ruthenium, Zirconium and Silver” by
Antoniac Vasile Iulian, Rau Dzhulietta, Semenescu Augustin, Dawod Nazem, Geanta Victoras, Voiculescu Ionelia, Mates Ileana Mariana, Solea Marina Roxana

2020 “Daniel Bunea” Award – RoMaT 2020
for excellence in materials engineering and science
given at
8th International Conference on Materials Science and Technologies – RoMat 2020, November 26-27th, BUCHAREST, ROMANIA

2019 CERTIFICATE OF EXCELLENCE awarded for the presentation “Antibacterial and bioactive materials for biomedical implant applications“ at the International Seminar on Biomaterials and Regenerative Medicine BIOREMED 2019, Craiova Romania

2018 Excellence Award – RoMaT 2018
for relevant contribution into the field of materials science and engineering
given at
7th International Conference on Materials Science and Technologies – RoMat 2018, November 15-18th, BUCHAREST, ROMANIA

2005 Winner of a NATO-CNR Advanced Fellowship for the studies and research at Italian public institutions in the field of chemistry *(Italy)*.
ADVANCED FELLOWSHIPS PROGRAMME at the Institute of Nanostructured Materials, Italian National Research Council (ISMN CNR, Roma).
Confirmation Letter CNR, Piazzale Aldo Moro 7 of March 15 th 2005.
Pos. 216.2170 Prot. N. 0015502
Vincitori Pos. 215.36 S/01 Prot. 0013806 Date 08/03/2005

HONORS

Global Top 2% Scientist Ranking (*PLOS Biology* / Stanford University): Listed among the world's top 2% most-cited scientists across all fields in the 2021, 2023, 2024, and 2025 releases of the standardized citation metric database published by *PLOS Biology*. *Official certificates available upon request.*



Reference: Ioannidis, John P.A. (2024), "August 2024 data-update for "Updated science-wide author databases of standardized citation indicators"", Elsevier Data Repository, V7, doi: 10.17632/btchxktzyw.7

PROJECT EVALUATIONS & PEER REVIEW

Project Evaluator: Regional Programming Center, Autonomous Region of Sardinia *(Protocol No. 0009798, 2011)*

International Peer Reviewer:
The Research Council of the Sultanate of Oman and
Qatar National Research Fund (QNRF)

PROJECT LEADERSHIP & PARTICIPATION

Project Leader of the Raman DXR Seed Unit Program (Europe) of Thermo Fisher Scientific Company (2016).
Thermo Fisher Scientific S.p.A. Sede Legale: Strada Rivoltana 20090 Rodano, Milano, Italia tel.: +39 02 95059 1 fax: +39 02 95059256

CNR Project: "Materials and New Technologies for Healthcare"
Reference: DCM.AD007 – *Chemistry and Materials for Health and Life Sciences*

MEMBER of COST Action BM1401 Raman4Clinics
Raman-based applications for clinical diagnostics
https://www.raman4clinics.eu/partners/list-of-partners/

Ministry of Health Funded Projects (Italy)

Project 1: *Stem Cells: New Tools in Clinical Applications*
ID: IZSLT 02/15 | CUP Code: G88C15000160001

Project 2: *Innovative Technologies in Regenerative Therapy: Stem Cells and Scaffolds in Veterinary Orthopedics*
ID: IZSLT 01/17 RC | CUP Code: G89I17000010001

Project 3: *Regenerative Therapy in Companion Animal Veterinary*

Medicine: In Vitro Challenge on Solid and Semi-Solid Scaffolds for Umbilical Cord Stem Cell Isolation Protocols
ID: IZSLT 02/21 RC | Duration: Dec 30, 2021 – Dec 29, 2023 (2 Years) | CUP Code: G82C21000790001

Project 4: *Regenerative Therapy: Utilization of Mesenchymal Stem Cells for Functional Recovery of Mammary Tissue – Dairy Sheep Mastitis Model*
ID: IZSLT 10/22 RC | Duration: Dec 15, 2022 – Dec 14, 2024 (2 Years) | CUP Code: G89I22001210001

Project 5: *Development of Engineered Cell Lines for Innovative Experimental Toxicology Studies as Alternatives to Animal Models and Bioresource Collection*
ID: IZSLT 01/23 RC | Duration: Dec 15, 2023 – Dec 15, 2025 (2 Years) | CUP Code: G89I23001400001

International Funded Projects
Project: *Strengthening the Integration of HEU-Production for the Ceramic Industry* (2019–2020)
Program / Funder: Academic Innovation Fund – *Modernization of Higher Education Project*, Republic of Uzbekistan
Lead Institution: Tashkent Chemical-Technological Institute
Total Project Value: $200,000 USD

Bilateral biennial project: 2021-2022
CNR/NSFC(Cina) ID: **11002**
« Degradation Control and Synergistic Osteogenesis Mechanism of Sr- and Cu-Substituted Tricalcium Phosphate-Coated Zn-Li Alloys for Biomedical Implants »

INTERNATIONA PROJECT
EUROSTAR – MUR
RESORBABLE MAGNESIUM IMPLANTS WITH ANTIBACTERIAL SURFACE- REMAGIS
CUP B83C24008650006
01/04/2025 - 31/03/2028

INDUSTRY COLLABORATIONS & TECHNOLOGY TRANSFER

- Manifattura Pri.Ma.Tex S.r.l. (2016): Project Leader for "Development of High Mechanical Strength Polymer Nanocomposites" (ISM Protocol No. 0000393).

- Colgate-Palmolive Commerciale S.r.l. (2008): Contracted Research Lead for "Research and Experimental Studies on Nanoparticles for Dental Applications" (ISM-CNR Protocol No. 0001138).

ORGANIZATION OF INTERNATIONAL CONGRESSES:

Chair of the 1st "BIOMAH"
CHAIR and organizer Conference 1st BIOMAH -2016
"Biomaterials for Tissue and Genetic Engineering and the Role of Nanotechnology" 17-20 October, 2016, Rome, Italy
https://biomah.ism.cnr.it/?lang=en

Chair of the 2nd "BIOMAH"
CHAIR and organizer Conference 2nd BIOMAH -2018
"Biomaterialsand Novel technologies for Healthcare" 8-11 October, 2018, Frascati (Rome area), Italy
https://biomah.ism.cnr.it/?lang=en

Chair of the "BIOMAH" on line workshop
CHAIR organizer Workshop BIOMAH -2021
"Biomaterialsand Novel technologies for Healthcare" 19 October, 2021, Rome, Italy
https://biomah.ism.cnr.it/?lang=it

Chair of the 3rd "BIOMAH"
CHAIR and organizer Conference 3rd BIOMAH -2022
"Biomaterialsand Novel technologies for Healthcare" 18-21 October, 2022, Rome, Italy
https://biomah.ism.cnr.it/?lang=en

Chair of the 4th "BIOMAH"
CHAIR and organizer Conference 4th BIOMAH -2024
"Biomaterialsand Novel technologies for Healthcare" 15-18 October, 2024, Rome, Italy
https://biomah.ism.cnr.it/?lang=en

Organizing Committee Member
20th Annual World Dental Summit 2017 International Conference, March 20-22, 2017, Rome, Italy
Special Recognition Certificate from Editors of Dentistry, Oral Health and Dental Management & Journal of Oral Hygiene & Health
http://worlddental.conferenceseries.com/

Organizing Committee of the Conference "Biophysics@Rome"2015
28-29 Maggio 2015
http://www.biophysicsatrome.org/en/biophysics-rome-2015

CHAIR person Exposanità Bologna, May 2012. 8° Jacob project "Biomaterials for medicine and healthcare"

EDITORIAL ACTIVITY:

Associate Editor of the journal **Bioactive Materials** 2019-present (https://www.keaipublishing.com/en/journals/bioactive-materials/editorial-board/)
IF(2025)=23.6 CiteScore 38.3 Q1

Associate Editor Fronties in Biomaterials Science
"Bio-interactions and Bio-compatibility"
https://www.frontiersin.org/journals/biomaterials-science/sections/bio-interactions-and-bio-compatibility/editors

EDITORIAL BOARD MEMBER:

Scientific Reports - Nature
https://www.nature.com/srep/about/editorial-board#condensedmatterphysics

Coatings MDPI
https://www.mdpi.com/journal/coatings/sectioneditors/Bio_Coatings
https://www.mdpi.com/journal/coatings/editors

Journal of Functional Biomaterials MDPI

FRONTIES in Bioengineering and Biotechnology
Editorial Board: Review Editor for "Tissue Engineering and Regenerative Medicine" journal
http://journal.frontiersin.org/journal/bioengineering-and-biotechnology/section/tissue-engineering-and-regenerative-medicine#editorial-board
http://loop.frontiersin.org/people/205989/overview

In Vitro Models" (Springer)
https://link.springer.com/journal/44164/editorial-board

EC Orthopaedics journal
https://www.ecronicon.com/orthopaedics-editorial-panel.php

The Open Biomedical Engineering journal
Editorial Board Membership (The Open Biomedical Engineering Journal)
https://benthamopen.com/TOBEJ/editorial-board/#

Journal of Advanced Drug Delivery Research –MEDCRAVE publishing, open access,
http://medcraveonline.com/JADDR/editorial-board

Drug Design Development & Therapy
MEDCRAVE publishing, open access,
https://medcraveonline.com/MOJDDT/editorial-board

Romanian Journal of Dental Research *(Editor – Prof. Horia Manolea)*

Scientific Bulletin Universitatea Politehnica Bucureşti SERIES B
Chemistry and Materials Science
https://www.scientificbulletin.upb.ro/seria/b/colegiu-editorial

Associate Editor of Uzhbekistan journal on Chemistry & Chemical Technology
http://journal.teti.uz/

Guest Editor of various special issues

PERSONAL DATA TREATMENT

I hereby authorize the processing of my personal data contained in my curriculum vitae in accordance with Art. 13 of Regulation (EU) 2016/679 (GDPR).

X yes, I agree

Rome Italy, 27/08/2026

Dzhulietta Rau