

CURRICULUM VITAE



Personal data:

Name and surname: **Carmen – Mihaela POPESCU**
Date of birth: May 25, 1979
Place of birth: Radauti, Suceava district, Romania
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Iasi district, ROMANIA
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Educational background:

1. **03.2011-02.2013, PostDoc:** Faculty of Chemical Engineering and environment protection, Gh. Asachi Technical University of Iasi, (PERFORM-ERA, ID-57649). Title: *Macromolecular materials used for conservation and restoration of the wooden cultural heritage objects*, supervisor: Acad. Bogdan C. Simionescu
2. **11.2005-05.2010, Doctor in Chemistry degree:** Petru Poni Institute of Macromolecular Chemistry of the Romanian Academy, Iasi, Romania. Thesis title: *Contribution to the study of ageing behaviour of some polymers used in conservation and preservation of artworks*, supervisor: Dr. Cornelia Vasile
3. **2002-2004, M.Sc. degree:** Faculty of Physics, Al. I. Cuza University, Iasi, Romania. Specialty: Optics, Spectroscopy and Physics of polymers. M.Sc. thesis title: *Characterisation by Fourier Transform Infrared Spectroscopy and Thermal Methods of some Lignins*, supervisors: Dr. Cornelia Vasile and Prof. Ghita Singurel
4. **2005-2008, B.Sc. degree:** Faculty of Chemistry, Al. I. Cuza University, Iasi, Romania. Specialty: Chemistry, Project for diploma degree: *The use of FT-IR Spectroscopy for material characterisation used in realisation and restoration of paintings*, supervisors: Prof. I. Humelnicu
5. **1998-2002, B.Sc. degree:** Al. I. Cuza University, Iasi, Romania. Specialty: Preservation and conservation of paintings, Project for diploma degree: *Methodology of differential consolidation of the painting layer detachment*, supervisors: Lect. M. Mustata and Rest. C. Bordasiu
6. **1998, High School:** E. Hurmuzachi High School of Chemistry and Biology, Radauti, Suceava district, Romania

Work experience:

1. **01.02.2019 – present, scientific researcher II**, Petru Poni Institute of Macromolecular Chemistry of the Romanian Academy
2. **29.07.2015 – present, associate researcher**, Centre for Wood Science and Technology, Edinburgh Napier University, Edinburgh, UK
3. **01.05.2018 – 28.02.2019 – invited professor**, JSPS Invitational fellowship FY2018, University of Tsukuba, Tsukuba, Japan
4. **01.04.2015 – 31.01.2019, scientific researcher III**, Petru Poni Institute of Macromolecular Chemistry of the Romanian Academy

5. **01.08.2011 – 31.03.2015, scientific researcher**, Petru Poni Institute of Macromolecular Chemistry of the Romanian Academy
6. **01.11.2005 – 31.07.2011, research assistant**, Petru Poni Institute of Macromolecular Chemistry of the Romanian Academy

Foreign language knowledge: *English* – advanced
French – intermediate
Italian – beginner
Japanese - beginner

Main scientific interest: bio-based (nano)composites; formulations with superhydrophobic and antibacterial properties for wood, wood based products and other organic substrate protection, cellulose nanocrystals and silica based nano-composites, Pickering emulsion polymerization; degradation processes affecting historic wood; the effect of different degradative factors (fungi, temperature, humidity and UV light) and the degradation/ageing mechanisms involved in wood and polymers degradation; thermal and chemical modification of wood

Experience experimental techniques: mid (FT-IR) and near infrared (NIR) spectroscopy and chemometric techniques, two dimensional correlation spectroscopy (2D-COS), X-ray diffraction, solid state ¹³C CP/MAS NMR spectroscopy, optical and electronic microscopy, thermal analysis methods (TG-DTG, DSC), dynamic water vapour sorption (DVS), non-destructive ultrasonic time-of-flight measurements

Specialization:

1. **15.08–17.12.2004:** *special research student*, JASSO Short-term student exchange promotion program (Inbound) scholarship, research with *Prof. Yusaku Sakata*, Department of Applied Chemistry, Faculty of Engineering, Okayama University, Okayama, Japan
2. **31.05–19.06.2005:** *visiting research student*, STSM COST E41, research with *Dr. Galina Telysheva*, Latvian State Institute of Wood Chemistry, Riga, Latvia
3. **08–22.03.2009:** *visiting research student*, STSM COST E54, research with *Dr. Tomas Larsson*, Innventia AB, Stockholm, Sweden.
4. **01–15.05.2011:** *visiting researcher*, STSM COST FP0904, research with *Prof. Parviz Navi and Dr. Julien Froidevaux*, Bern University of Applied Sciences, Biel/Bienne, Switzerland.
5. **05.10–16.12.2011:** *visiting researcher*, PERFORM-ERA "Postdoctoral Performance for Integration in the European Research Area" (ID-57649), financed by the European Social Fund and the Romanian Government, collaboration with *Prof. Callum Hill*, Centre of Wood Science and Technology, Edinburgh Napier University, Edinburgh, UK
6. **08-11.03.2012:** *visiting researcher*, PERFORM-ERA "Postdoctoral Performance for Integration in the European Research Area" (ID-57649), financed by the European Social Fund and the Romanian Government, collaboration with *Prof. Bernhard Lendl*, Institute of Chemical Technologies and Analytics, Vienna University of Technology, Vienna, Austria
7. **04.07–02.08.2012:** *visiting researcher*, The Royal Society of Edinburgh International Exchange Programme, collaboration with *Prof. Callum Hill and Dr. Daniel Ridley-Ellis*, Centre of Wood Science and Technology, Edinburgh Napier University, Edinburgh, UK
8. **24-31.08.2012:** *visiting researcher*, PERFORM-ERA "Postdoctoral Performance for Integration in the European Research Area" (ID-57649), financed by the European Social Fund and the Romanian Government, collaboration with *Dr. Eduard Fron*, Faculty of Chemistry, Molecular Imaging and Photonics Department, KU Leuven, Leuven, Belgium
9. **22.09–22.11.2012:** *visiting researcher*, PERFORM-ERA "Postdoctoral Performance for Integration in the European Research Area" (ID-57649), financed by the European Social Fund and the Romanian

- Government, collaboration with *Prof. Martin Moeller*, DWI at RWTH Aachen University, Aachen, Germany
10. **07.01–08.02.2014**: *visiting researcher*, STSM COST FP1006, research with *Dr. Graham Ormondroyd* and *Prof. Callum Hill*, The BioComposites Centre, Bangor University, Bangor, UK.
 11. **23-28.03.2014**: *visiting researcher*, STSM COST FP0904, research with *Prof. Parviz Navi* Laboratory, Bern University of Applied Sciences, Biel/Bienne, Switzerland.
 12. **30.03–05.04.2014**: *visiting researcher*, collaboration with *Dr. Erik Larnoy*, Norsk Institutt for Skog og Landskap, Ås, Norway
 13. **07.04–03.05.2014**: *visiting researcher*, STSM COST FP1205, research with *Prof. Wim Thielemans* at the KU Leuven, Campus Kortrijk in Kortrijk, Belgium.
 14. **28.04–11.05.2015**: *visiting researcher*, STSM COST FP1105, research with *Dr. Erik Larnøy* at the Norwegian Forest and Landscape Institute, Ås, Norway.
 15. **04.10 – 20.12.2015**: *visiting researcher*, STSM COST FP1205, research with *Dr. Mats Westin* and *Dr. Dennis Jones* at the SP Technical Research Institute of Sweden, Borås and Stockholm, Sweden.
 16. **04.07– 15.08. 2016**: *visiting researcher*, STSM COST FP1404, research with *Prof. Holger Militz* at the Institute of Wood Biology and Wood Technology of the Georg-August-University of Göttingen, Göttingen, Germany.
 17. **25-31.03.2018**: *visiting researcher*, STSM COST FP1407, research with *Prof. Lauri Rautkari* at Aalto University, Helsinki, Finland.

Training courses/schools: on *molecular spectroscopy* (2003-2004, Romania); *polymer spectroscopy* (2002-2004, Romania); *wood extractives in pulping and papermaking* (2006, Finland); *biotechnology for bioethanol production* (2009, Sweden); *project management* (2010, Romania); *thermo-hydro-mechanical treatments of wood: theory and practice* (2011, Switzerland); *chemometrics* (2011, Estonia); *advances in biomaterials* (2012, Austria); *bringing new functions to wood through surface modification* (2012, Austria); *finishing of the surface of thermally modified wood with UV lacquer products - theory and practice* (2013, Poland); *X-ray tomography and service life prediction* (2013, Belgium); *chemical and property changes in wood during THM-treatment* (2013, Finland); *durability studies in the field - assessment and evaluation* (2013, Germany); *dendrochronological dating of music instruments* (2015, Slovenia); *fire design of wood and other bio-based building products* (2016, UK); *product development from renewable resources, a hands-on workshop with leading experts on utilization of fibres from renewable resources* (2017, Denmark)

Organizational experience:

1. **28-29.06.2010** – *Eco-Sustainable Food Packaging Based on Polymer Nanomaterials, COST Action FA0904 Conference and WGs Meeting*, Iasi, Romania (Organising Committee Member)
2. **03-05.05.2012** – *IVth European Symposium on Religious Art, Restoration and Conservation*, Iasi, Romania (Organising Committee Member)
3. **09-11.04.2013** – *Evaluation, processing and predicting of THM treated wood behaviour by experimental and numerical methods, COST Action FP0904 Conference*, Iasi, Romania (Scientific Advisory Committee and Organising Committee Member)
4. **27-28.01.2014** – *WoodMusICK Opening Conference*, Paris, France (Scientific Advisory Committee)
5. **30.09-01.10.2014** – *Multidisciplinary Approach to Wooden Musical Instruments Identification, WoodMusICK Conference*, Cremona, Italy (Scientific Advisory Committee)
6. **10-11.03.2015** – *Advances in cellulose processing and applications –research goes to industry. Joint Working Groups & Management Committee meetings of COST Action FP1205*, Iasi, Romania (Scientific Advisory Committee and Organizing Committee Member)
7. **09-10.09.2015** – *Effects on playing on early and modern musical instruments, WoodMusICK Conference*, London, UK (Scientific Advisory Committee)
8. **13-14.10.2016** – *2nd International EPNOE Junior Scientists Meeting, Future Perspectives in Polysaccharide Research*, Sophia Antipolis, France (Scientific Committee)

9. **14-15.05.2018** – 3rd *International EPNOE Junior Scientists Meeting, Advances in fundamental and applied polysaccharide research*, Maribor, Slovenia (Scientific Committee)
10. **03-04.02.2021** – 4th *International EPNOE Junior Scientists Meeting, Polysaccharide Research – Fundamentals and Beyond*, Kortrijk, Belgium (Scientific Committee)
11. **18-19.08.2021** – The eleventh International Symposium on Two-dimensional Correlation Spectroscopy, 2DCOS-11, Iasi, Romania (Organizing Committee Member)

Mentoring experience:

1. **07-14.05.2011:** STSM-FP0904-7927, Tobias Turner from the Institute of Vocational Sciences in the Building Trade (IBW), Hanover, Germany, Research theme: *Correlation of HEMI-method and degree of crystallization*
2. **06-20.05.2012:** STSM-FP0904-060512-017500, Maria Ines Placencia Pena from the Bern University of Applied Sciences, Laboratory of Wood Technology, Biel/Bienne, Switzerland. Research theme: *Thermal and analytical characterization of welded wood*
3. **15.09.2020 - present:** Mustehsan Beg, PhD student at Edinburgh Napier University, Edinburgh, UK. Research: preparation and characterisation of the nanocellulose based battery separators

PhD theses referent:

1. **17.11.2016:** *Non-Destructive Surface characterization of Wood Façade Materials and Wood Fungi by Attenuated Total Reflectance Fourier Transform Infrared Spectroscopy*, B.S. Gupta PhD student, Norwegian University of Science and Technology (NTNU), Faculty of Engineering Science and Technology, Trondheim, Norway
2. **30.06.2017:** *Obtention and Functionalization of Cellulose Nanofibers from agave tequilana Weber var. azul*, Eduardo Robles Barrios PhD Student, University of the Basque Country, San Sebastian, Spain

Master thesis supervisor:

2018/2019 – Andreas Konstantinou, MSc Advanced Materials Engineering Masters Dissertation, title: *Manufacturing a hydrophobic coating for timber material*, Edinburgh Napier University, Edinburgh, UK

Editorial member of journals:

European Journal of Science and Theology (Guest editor 2012);
 Wood Material Science and Engineering (2017-present);
 Forests (Guest editor 2020-2021)
 International Wood Products Journal – *Associate Editor*, 2021-present

Scientific Society Member:

2016 – present: EPNOE Junior (from 03.2021 – *vice-chair* of EPNOE Junior)
 2016 – present: ASRO/ CT 118
 2018 – present: SWST (International Society of Wood Science and Technology)
 2018 – present: MoDeSt Society (Modification, Degradation and Stabilisation of Polymers)

Others: ability to communicate with people of different ages, social position, culture, and education, and to work with them as a team member or coordinator. Able to adapt to changes, while still delivering to deadlines.

Skills: painting of icons in neo-byzantine style, nature and flowers painting and drawing; carpentry; crochet; knitting; embroidery.

Interests: Asian history, history of art (antiquity, renaissance); music (piano, violin, Pan's pipe, flute, classical guitar).

Scientific results:

Published works: 58 in journals (48 ISI journal, 10 other journals);
Citations: 1467, **Index h** = 19 (source Scopus – without self citations)
Chapters in books: 8;
Proceedings: 26;
Keynotes/conferences/lectures: 14 (13 international, 1 national);
Communications: 69 (62 international, 7 national);
Posters: 67 (58 international, 9 national);
Scientific research projects – member: 11 (4 international, 7 national, 2 project leader);
COST Actions – member: 16;

Links:

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ResearchGate: https://www.researchgate.net/profile/Carmen-Mihaela_Popescu
UEFISCDI ID: U-1700-036T-1923
<https://blogs.napier.ac.uk/cwst/carmen-mihaela-popescu/>

