



Present position Emeritus Professor of the University **AUREL VLAICU** of Arad, **ROMANIA**
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EDUCATION

Post doctoral stages in 1992:

- **Monash University, Australia** – Prof. Dr. Roger F.C. Brown (Reduced pressure pyrolysis);
- **Technische Hochschule Darmstadt, Germany** – Prof. Dr. Herbert Mayr (Electrophilic addition of carbonium ions to olefines)

1982 PhD in Organic Chemistry (*Solvolytic study of dibenzocycloalkenes with substituted double bonds*; Supervisor: Acad. Prof. Dr. Ecaterina Cioranescu-Nenitzescu)

Specializations:

- **1997** - *Biochemistry* course organized by the University of Bucharest;
- **1971** - *Chromatography* course organized by the University of Bucharest,

Study:

- **1963-1968** – Polytechnic Institute, Bucharest, Romania, Faculty of Industrial Chemistry, Specialization *Technology of pharmaceutical compounds synthesis* – graduate on first place with 9.98 (from 10).

POSITIONS

- **2010** - present Emeritus Professor, University **AUREL VLAICU** of Arad;
- **2004** - Habilitation in Chemical Engineering by the Romanian Ministry of Education;
- **1997- 2019** Associate Professor, University **POLITEHNICA** from Bucharest;
- **1997 - 2010** Full Profesor, University **AUREL VLAICU** of Arad;
- **1995 - 1997** Reader, University **AUREL VLAICU** of Arad;
- **1988 - 1995** Lecturer, University **POLITEHNICA** from Bucharest;
- **1968 - 1988** Resercher, **Centre of Organic Chemistry** of Romanian Academy;
- **1972 - 1988** Teaching assistant, University **POLITEHNICA** from Bucharest.

MANAGEMENT POSITIONS

- **1995 - 2004** – Head of Textile Department, University **AUREL VLAICU** of Arad;
- **2004 - 2008** – Vicerector for reserch, University **AUREL VLAICU** of Arad;

Research fields: Biotechnology applied to food and textile fields, Fine synthesis of organic compounds with potential biologic activity, Synthesis and structure determination of coordinative compounds with polydentated ligands, Antioxidants from food sources and their properties, waste valorization (textile, food fields), Sustainable development solutions.

Publications:

- Books and Chapters of books: 22
- Patents: 5
- Papers in Scientific journals and Conference proceedings: 156

Selection of Publications

Books and Chapters of books:

M.D. Stanescu, Biowaste valorization. The wine industry case in: *BIOWASTE TO VALUE-ADDED PRODUCTS Economics and Technologies* editors T. Bayer, M. Kircher, pp. 1-22, Publ. House Springer, Berlin, Heidelberg.
https://doi.org/10.1007/10_2025_277

M.D. Stanescu, Ecaterina Cioranescu-Nenitzescu an outstanding teacher in: *PORTRAITS OF REMARKABLE WOMEN FROM THE HISTORY OF ROMANIAN CHEMISTRY* editor **M.D. Stanescu**, Publ. House POLITEHNICA Press, 2019 pp 28-30, ISBN 978-606-515-859-7.

M.D. Stanescu, *PESTICIDES. SYNTHESIS, ACTIVITY AND ENVIRONMENTAL ASPECTS*, Publ. House Printech Bucharest, 2014, ISBN 978-606- 23-0315-0, 483 p

M.D. Stanescu, Platforme industriale, Structura si rol in: *MEDIUL si INDUSTRIA*, coord. M.D. Stanescu, Publ. House “Aurel Vlaicu” University, Arad, 2006, pp. 38-50.

M.D. Stanescu, S. Mihuta, M.S. Bucur, M. Raileanu, D. Popovici, Wool Finishing with Enzymes in: *ADVANCES in BIOTECHNOLOGY for TEXTILE PROCESSING*, editors R. Hardin, D.E. Akin si S.J. Wilson, Publ. House Univ. of Georgia, Athens, 2002, ISBN 09723620-0-2, pp. 109-116 .

M.D. Stanescu, E.L. Puscas, M. Pustianu E.L. Puscas, M.D. Stanescu, M. Fogorasi, V. Dalea, *DEZVOLTAREA DURABILA prin PROTECTIA MEDIULUI si BIOTEHNOLOGII TEXTILE*, Publ. House “Aurel Vlaicu” University, Arad, 2002, ISBN 973-9361-91-9 (105 p from 325 p)

M.D. Stanescu, E.L. Puscas, M. Pustianu, *ELEMENTE de ECOLOGIE TEXTILA si ECOTOXICOLOGIE*, Publ. House Mirton, Timisoara, 2002, ISBN 973-585-788-X (70 p from 214 p)

M.D. Stanescu, A. Marton. G. Marton, *SOURCES OF INFORMATION IN CHEMICAL LITERATURE*, Publ. House “Aurel Vlaicu” University, Arad, 1997, ISBN 973-98366-8-2 (90 p from 150p)

M.D. Stanescu, *COLORANTI ORGANICI*, Publ. House “Aurel Vlaicu” University, Arad, 1996, ISBN 973-97708-1-9 (191 p)

Papers in Scientific. journals:

C. Popescu, **M.D. Stanescu**, Eco-Friendly Processing of Wool and Sustainable Valorization of This Natural Bioresource. *Sustainability* **2024**, *16*, 4661.
<https://doi.org/10.3390/su16114661>

M. Kircher, E. Aranda, P. Athanasios, I. Radojcic-Rednovnikov, M. Romantschuk, M. Ryberg, G. Schock, S. Shilev, **M.D. Stanescu**, J. Stankeviciute, J. Surmacz-Górska, A. Tsipa, M. Vasquez, M. Villano, C.E. Vorgias, Treatment and valorization of bio-waste in the EU. *EFB Bioeconomy Journal*, **2023**, *3*, 100051,
<https://doi.org/10.1016/j.bioeco.2023.100051>

M.D. Stanescu, Applications of enzymes in processing cellulosic textiles – a review of the latest developments. *Cellulose Chem. Technol.*, **2023**, 57 (1-2), 1-15. <https://doi.org/10.35812/CelluloseChemTechnol.2023.57.01>

M.D. Stanescu, Goals for a sustainable development and the environmental protection. *Romanian Journal of Ecology & Environmental Chemistry*, **2022**, 4(2). <https://doi.org/10.21698/rjeec.2022.205>

M. Tociu, A. Hirtopeanu, **M.D. Stanescu**, Improving Grape Seed Oil Extraction by Enzymatic Seed Pretreatment. *Grasas y Aceitas*, **2021**, 70(4), e434. <https://doi.org/10.3989/gya.1000202>

M.D. Stanescu, State of the art of post-consumer textile waste up-cycling to reach the zero waste milestone. *Environ. Sci. Pollut. Res.*, **2021**, 28, 14253–14270. <https://doi.org/10.1007/s11356-021-12416-9>

D. Chambre, M. Tociu, **M.D. Stanescu**, C. Popescu, Influence of composition on the thermal behavior of oils extracted from the seeds of some Romanian grapes. *J. Sci. Food Agric.*, **2019**, 19 (14), 6324-6332. <https://doi.org/10.1002/jsfa.9909>

M.D. Stanescu, M. Fogorasi, Biotechnology a tool for modification of cotton fibre. *Chimica oggi*, **2018**, 36(5), 56-58.

A. Sanislav, M. Fogorasi, **M. D. Stanescu**, S. Muntean, M. Dochia, Ultrasound Effect on Dyeing Wool Fibers with Two Anthraquinone Dyes. *Fibers Polym.*, **2015**, 16, 62-66. <https://doi.org/10.1007/s12221-015-0062-5>

M.D. Stanescu, S. Gavrilas, R. Ludwig, D. Haltrich, V.I. Lozinsky, Preparation of immobilized *Trametes pubescens* laccase on a cryogel-type polymeric carrier and application of the biocatalyst to apple juice phenolic compounds oxidation. *Eur Food Res Technol*, **2012**, 234, 655–662. <https://doi.org/10.1007/s00217-012-1676-0>

M.D. Stanescu, A. Sanislav, R.V. Ivanov, A. Hirtopeanu, V.I. Lozinsky, Immobilized Laccase on a New Cryogel Carrier and Kinetics of Two Anthraquinone Derivatives Oxidation. *Appl. Biochem. Biotechnol.*, **2011**, 165, 1789–1798. <https://doi.org/10.1007/s12010-011-9395-8>

M.D. Stanescu, M. Fogorasi, B.L. Shaskolskiy, S. Gavrilas, V.I. Lozinsky, New potential biocatalyst by laccase immobilisation in PVA cryogel type carrier. *Appl. Biochem. Biotechnol.*, **2010**, 160, 1947-1953. <https://doi.org/10.1007/s12010-009-8755-0>

M.D. Stanescu, M. Dochia, D. Radu, C. Sirghie, Green Solution for Cotton Scouring. *FIBRES & TEXTILES in Eastern Europe*, **2010**, 18, No. 3 (80) 109-111.

T. Visnapuu, A.D. Zamfir, C. Mosoarca, **M.D. Stanescu**, T. Alamae, Fully automated chip-based negative mode nanoelectrospray mass spectrometry of fructooligosaccharides produced by heterologously expressed levansucrase from *Pseudomonas syringae* pv. tomato DC3000. *Rapid Commun. Mass Sp.*, **2009**, 23, 1337-1346. <https://doi.org/10.1002/rcm.4007>

M.D. Stanescu, C. Popescu, A. Rus, C. Guran, Thermal Behaviour of Some Dibenzo-bicyclo[2.2.2]octane derivatives. *J. Therm. Anal. Calorim.*, **2008**, 91, 535-538. <https://doi.org/10.1007/s10973-007-8502-0>

S. Girotti, D. Fabbri, V. Baravelli, **M.D. Stanescu**, C. Draghici, P. Restani, E. Chirila, Environmental studies in Italian Universities. *Environmental Engineering and Management Journal*, **2005**, 4, 177-182

M.D. Stanescu, C. Guran, I. Jitaru, Coordination Compounds of a Potential Polydentate Ligand. *New J. Chem.*, **1998**, 295-298.

MD Banciu, RFC Brown, KJ Coulston, FW Eastwood, C Jurss, I Mavropoulos, **M Stanescu** and UE Wiersum, Formation of Cyclopent[*h*]acephenanthrylene From 1,2-,

1,3-, 1,4- and 2,3-Triphenylenedicarboxylic Acid Derivatives on Flash Vacuum Pyrolysis at >900°C. *Australian Journal of Chemistry*, **1996**, 49(9) 965 – 976. <https://doi.org/10.1071/CH9960965>

J. Henninger, H. Mayr, M. Patz, **M.D.Stanescu**, Electrophilic Reactions of the Dibenzo[a,d] tropylium Ion. *Liebigs Ann.*, **1995**, 2005-2009. <https://doi.org/10.1002/jlac.1995199511281>

M.D. Banciu, **M.D. Stanescu**, A. Petride, L. Parvulescu, M. Pop, Flow Vacuum Pyrolysis of Polycyclic Compounds 6. Pyrolysis of Dibenzo (CH)₈ Hydrocarbons, *Chem. Ber.*, **1993**, 126, 2513-2517. <https://doi.org/10.1002/cber.19931261127>

Invited conferences (selection)

- **Eco-economic solutions for the valorization of sheep wool** - 7th International Summer School on Circular Bio-economy and Sustainable Development, 27.06-4.07, 2025, Thessaloniki, Greece.
- **Valorization of the grape seeds resulted in the wine production process** – XXXVIIth Romanian Chemistry Conference, 25-27.09. 2024, Targoviste, Romania
- **Sustainable Policy in Processing Textile Fibers and Materials Based on Cotton** – 6th International Summer School on Circular Bio-economy and Sustainable Development, 28.06-1.07, 2024, Thessaloniki, Greece.
- **Various solutions to textile dye pollution** - Quo Vadis Life Sciences conference, 23-27.06, 2021, Opole, Poland
- **Spectroscopy a tool for food analysis**, Symposium of the American Romanian Academy of Arts and Sciences (ARA), 2021.
- **Thermal analysis a valuable tool for studying polimer composites**, 28th conference Progress in Organic and Macromolecular Compounds, 7-9.11, 2021, Iasi, Romania.
- **Suggestions pour la valorisation complexe des pépins de raisin**, Dixième Colloque Franco-Roumain de Chimie Appliquée, 27-29.06, 2018, Bacau, Roumanie
- **Laccase a versatile enzyme and its applications in food and textile domains**, XXXIIIrd Romanian Chemistry Conference, 1-3.10, 2014, Calimanesti-Caciulata, Romania.
- **Applications des pectinases dans les industries textile et alimentaire**, Hutieme Colloque FrancoRoumain de Chimie Appliquée, 15-18.09. 2014, ENSCM Montpellier, France
- **Thermal Behaviour of Biomaterials Based on Cryogel PVA**, 7th International Conference of the Chemical Societies of the South European Countries. 15-17.09, 2010, Bucharest, Romania.

Reserch Projects (selection)

- Technology for 2-ethylanthraquinone synthesis (project coordinator - Centre of Organic Chemistry, financed by the Ministry of Chemistry);
- Development of new subjects for environmental protection in University (project coordinator – University Aurel Vlaicu in cooperation with Polytechnic University Timisoara, financed by the World Bank and Romanian Government)
- Biotechnology for textile wastewater treatments (Romanian coordinator, bilateral project Romania Slovenia – Aurel Vlaicu University, financed by the Ministry of

Education) BIOTECH Project, Technology for textile wastes bio-valorization (partner coordinator – Aurel Vlaicu University, financed by the Ministry of Education and Research)

- Immobilized enzymes on/in cryogel polymers – preparation and applications (Romanian coordinator, bilateral project Romania-Russian Federation—Aurel Vlaicu University, financed by the Ministry of Education and Research)
- Projects of European Chemistry and Chemical Engineering Education Network 1 and 2 (Romanian coordinator)
- COST 847 Textile quality and biotechnology (Romanian coordinator)
- COST 928 Control and exploitation of enzymes for added-value food products (Romanian coordinator)

AWARDS

1991 C.D. Nenitzescu - **Romanian Academy** award for scientific research results

2006 Diploma and medal Gheorghe Spacu – **Romanian Chemical Society**

2009 Diploma and medal C.D. Nenitzescu - **Romanian Chemical Society**

2019 Diploma and medal C. Istrati - **Romanian Chemical Society**

2024 Diploma and medal E. Bratu - **Romanian Chemical Society**

CNCSIS awards for published papers in Q1 or Q2

Profesional Societies member and Positions

Romanian Chemical Society (Societatea de Chimie din Romania SChR, www.schr.ro) since 1993. General Secretary 2001-2005, 2005-2011, 2016-2021, Vice-president 2021-2024, Interim President 2024-2025.

EUCHEMS - Member of Division Chemistry and the Environment since 2017

European Biotechnology Federation - National expert

OTHERS

Reviewer for more than 30 scientific journals;

Evaluator of Scientific Projects;

Evaluator of PhD Theses;

Member of the Editorial board for:

Food Science and Technology [ISSN: 2331-513X (Print), ISSN: 2331-5156 (Online)],

Romanian Journal of Ecology & Environmental Chemistry [ISSN: 2668-8530 (Online)],

Buletinul Societatii de Chimie din Romania [www.schr.ro].

Hobbies: Opera and Classical music; Travel; Knitting.