



Europass  
Curriculum Vitae

## Personal information

### First name(s) / Surname(s)

**MIRCEA - NICUSOR NICOARA**

### Address(es)

Iasi, Str. Prof. Eduard Caudella, 38 B.

### Telephone(s)

+40.232.201525, Mobile: +40.7420.98721

### E-mail

mirmag@uaic.ro/ mirmag\_02@yahoo.com

### Nationality

Romanian

### Date and place of birth

May 18, 1962, Sighet town, Maramures county

### Gender

Male

## Work experience

### • Dates

1991 - present

### • Name and address of employer

"Alexandru Ioan Cuza" University of Iasi - Faculty of Biology, Department of Biology, Laboratory of Hydrobiology

Bd. Carol I, 23A, 700505, Iasi

qualification by Bachelor degree – biologist

Teaching and research activity

### • Type of business or sector

2009-present, professor, Laboratory of Hydrobiology, Faculty of Biology, "Alexandru Ioan Cuza" Univ. of Iasi

### • Occupation or position held

2004-2009 – reader/associate professor, Laboratory of Hydrobiology, Faculty of Biology, "Alexandru Ioan Cuza" Univ. of Iasi

1996-2004 – lecturer, Laboratory of Hydrobiology, Faculty of Biology, "Alexandru Ioan Cuza" Univ. of Iasi

1991-1996 – teaching assistant, Laboratory of Hydrobiology, Faculty of Biology, "Alexandru Ioan Cuza" Univ. of Iasi

1991, research assistant in Palaeoanthropology, Institute of Trachology Bucharest

1988-1991, Biology teacher: Roman (Neamt), Suceava

### • Main activities and responsibilities

**TEACHING ACTIVITY: 1991 – present** Faculty of Biology:

**Disciplines taught** (Bachelor and Masters): Environmental Monitoring, Environmental Legislation and Policies, Biodiversity and productivity of the aquatic environments, Aquatic resources, Nature conservation, Anthropology, Hydrobiology, Marine biology, Aquaculture

**Biological field trips/applications:** Aquatic ecology, Marine biology

**Teaching practice:** years of study III and IV

**FIELDS OF EXPERTISE:** Aquatic ecology and toxicology: – Ecology of benthic communities and diversity of aquatic macroinvertebrates; Nature conservation in protected areas, wetlands especially.

## PARTICIPATION IN RESEARCH CONTRACTS AND PROGRAMMES:

### a. COLABORATOR

- Grant 41 - **MEN**, COMPLEX STUDY OF THE MOLDOVIAN PROTECTED AREAS AND THEIR ACTUAL SITUATION

- Grant 4011 - **MEN**, RESEARCHES REGARDING THE KNOWLEDGE OF THE BIODIVERSITY FROM THE PRUT RIVER BASIN

- Grant 15 - **MEN**, RESEARCHES REGARDING THE CONCENTRATION OF SOME RADIO ISOTOPES THROUGHOUT THE FOOD CHAINS CHARACTERISTIC TO BLACK SEA BIOCOENOSSES IN THE AREA AGIGEA - EFORIE

- Grant 717 - **MCT**, DYNAMICS OF THE MAIN POPULATIONS OF HYDROBIONTS AS POSSIBLE FOOD RESOURCES IN THE AREA AGIGEA - EFORIE, UNDER THE INFLUENCE

#### OF THE CANAL DANUBE-BLACK SEA AND OF PORT AGIGEA

- *ACADEMIC EDUCATION, PROMOTOR OF AN ECOLOGIC THOUGHT AND SYSTEM*, 1995, Funded by Open Society Foundation (SOROS)
- *BIODIVERSITY STUDY OF THE RAZIM-SINOE LAGOON AND BLACK SEA'S SHORE (FROM PORTITA TO PERIBOINA)*, 1995-1996, coordinator, University of Southampton, U.K.
- Project **Phare** for *DEMOCRACY DEVELOPMENT BY ENVIRONMENTAL EDUCATION*, 1998-1999, lecturer at CET Moldavia Pascani
- Projeet Européen Commun **TEMPUS** - 39628 - **MEN**, *QUALITE DANS L'ENSEIGNEMENT INTERDISCIPLINAIRE SUR L'ENVIRONNEMENT*
- Project **Phare** *CENTRES FOR EUROPEAN STUDIES IN ROMANIA*, UE-Romania (RO 9706-01-02), 2000
- Project **ESTROM** *PERSISTENT ORGANIC POLLUTANTS IN RIVER BAHLUI*, University of Lausanne, Switzerland, 2004
- Project **CEEX** *CENTRE FOR SUSTAINABLE EXPLOITATION OF ECOSYSTEMS (CEXDUREC)*, 2005-2008
- Project **CEEX** 4174, module IV *EXTENSION OF THE LABORATORY FOR AQUATIC ECOLOGY AND AQUACULTURE POTOCI FOR ASSESSEMENT OF WATER POLUTION IN THE MOUNTAIN LAKES INDUCED BY TROUT FLOATING CAGES, ACCORDING TO WATER FRAMEWORK DIRECTIVE 60/2000CEE*, 2006-2008
- Project SOP-HUMAN RESOURCES DEVELOPMENT/89/1.5/S/63663 - *TRANSNATIONAL NETWORK FOR THE INTEGRATE MANAGEMENT OF THE POSTDOCTORAL RESEARCH IN THE FIELD OF SCIENCE COMMUNICATION (COMMSCIE)* 2011-2012
- Project SMIS:7039 *INTEGRATE MANAGEMENT OF THE THE NATURE 2000 MARINE SITES (SCI) NETWORK FROM THE ROMANIAN SHORE*, funded by SOP-ENVIRONMENT, 2011-2013
- Project SMIS-CSNR 36364 *DEVELOPMENT OF THE MANAGEMENT IN THE SITES NATURE 2000: DEALUL LUI DUMNEZEU, AND PADUREA SI PAJISTILE DE LA MARZESTI – IASI COUNTY*, funded by SOP-ENVIRONMENT, 2012-2013
- Project *SUSTAINABLE MANAGEMENT FOR THE SITE NATURE 2000: ROSCI0080 FÂNAȚURILE DE LA GLODENI*, funded by SOP-ENVIRONMENT, 2013
- Project *BIODIVERSITY CONSERVATION IN THE SITE NATURE 2000 RARAU-GIUMALAU BY AN INTEGRATE AND PARTICIPATORY MANAGEMENT*, 2015
- Project „*PLANS FOR THE MANAGEMENT OF THE SITES NATURE 2000: ROSCI0255, ROSCI0391, ROSPA0049*”, funded by SOP-ENVIRONMENT 2007-2013, cofunded by European Fund for Regional Development, 2015
- Project *EUROPEAN RAPTOR BIOMONITORING FACILITY (ERBFacility)* (Action COST CA 16224), 2017-2018, funded by International Programme COST.

#### **b. COORDINATOR OF RESEARCH CONTRACTS AND PROGRAMMES**

- Project **MATRA** RO/97/04: *SCIENCE SHOPS IN ROMANIAN MOLDAVIA* - the Netherlands Ministry for External Affairs 1999-2001
- Project "VLADENI 2000" - *BIOLOGICAL CONSERVATION IN THE WETLAND LARGA JIJA-VLADENI AREA (IASI COUNTY, ROMANIA)* - **British Petroleum Environmental Programme**
- Project **MATRA** *PROBLEM-BASED LEARNING THROUGH SCIENCE SHOPS IN ROMANIA* - the Netherlands Ministry of Foreign Affairs DZO-UM/1299/2002, 2002-2005
- *LABORATORY FOR AQUATIC ECO-TOXICOLOGY, MEDCT*, 2007.
- Project 1/2/193 **E.U. RESOURCES PILOT CENTRE FOR CROSS-BORDER PRESERVATION OF THE AQUATIC BIODIVERSITY OF PRUT RIVER, 2012-2015, funded by The Joint Operational Programme Romania-Ukraine-Republic of Moldova 2007-2013**
- **Component Project** *COMPLEX ASSESSMENT OF PRIORITY POLLUTANTS IN VARIOUS MATRICES OF WATER USE, AND IDENTIFICATION OF HAZARDS UPON THE ECOSYSTEMS AND HUMAN HEALTH* within the **Complex Project INTEGRATED AND SUSTAINABLE PROCESSES FOR ENVIRONMENTAL REMEDIATION, REUSE OF WASTEWATER AND WASTE RECOVERY (SUSTENVPRO)** Project Code: PN-III-P1-1.2-PCCDI-2017-0245, Financing Agreement no. 26PCCDI / 2018

#### **Education and training**

- Period (from – until)
  - ◆ primary school: 1968 – 1976;
  - ◆ high school: 1976 – 1980
  - ◆ university: 1984 – 1988;
  - ◆ Doctorate: 1993 – 2000: Biology - "Alexandru Ioan Cuza" University of Iasi

- Name and type of organisation providing education and training
- Principal subjects/occupational skills acquired
- Title of qualification awarded
  - ◆ Sanitary High School, Suceava;
  - ◆ "Alexandru Ioan Cuza" University of Iasi, Bachelor in Biology, Faculty of Biology – Geography - Geology (1984-1988)
  - ◆ Doctorate: 1993 – 2000: Biology - „Al. I. Cuza” University, Iasi, Faculty of Biology – **title of doctoral thesis:** „Influence of pollution and Canal Danube-Black Sea upon the dynamics of the Gastropods from the Romanian upper, mean and lower littoral of the Black Sea, in the area Constanta – Eforie”. **Doctor in Biology** – Zoology, since 2000
  - ◆ **Habilitation thesis** in 2017: "Applications of eco-toxicological analysis in the diagnosis of the quality of aquatic life media". **PhD supervisor in Environmental Science** since 2018.
  - ◆ Training stages – in the country:
    - International seminar *Training in European Affairs, Support to the establishment and development of European Studies Centers*, Phare RO 9706.01.02, Busteni, 18–29 September 2000
    - International seminar *Measures and proceedings for the protection of the water quality of River Prut*, Iasi Romania, 11-12 April 2001
    - National Symposium with international participation *Man and environment - 2002*, Iasi, 14-16 March 2002
    - Workshop *Interactions between the civil society and Science shops – experiences and perspectives*, Iasi, 24 June 2003
    - Summer school *University – engine of the regional development in Europe*, 2<sup>nd</sup> Ed., Curtea de Arges, 15-20 July 2003
    - International technical colloquium *Water and energy management in the perspective of European integration of Romania*, Centre for environmental resources – CEREM Iasi and ESIP Poitiers, France, 3-4 December 2003
    - International seminar *Environmental Management in Romania*, Bucharest, 29-30 September 2003, Japan International Cooperation Agency (JICA)
    - Workshop *Products eco-design and innovation*, International Institute for Industrial Economics at Lund University, Sweden and Academic Organization for Environmental Engineering and Sustainable Development, Iasi 21 April 2004
    - Workshop *Wastes management*, International Institute for Industrial Economics at Lund University, Sweden and Academic Organization for Environmental Engineering and Sustainable Development, Iasi 21 April 2004
    - Regional meeting of the promoters of Bologna, and ERASMUS seminar, Iasi, 11 March 2005
    - International technical colloquium *Energy-Environment L'amelioration des facteurs d'environnement*, Centre for environmental resources – CEREM Iasi, Centre for environmental resources – CEREM Iasi and ESIP Poitiers, France, 27-28 April 2006
    - Limnological–ecological Summerschool, Potoci, August-September 2006
    - Joint Operational Programme Romania-UKRAINE-REPUBLIC OF MOLDOVA 2007-2013, Training session The Grant Contract 23.04.2012, BRCT Iasi
    - Joint Operational Programme Romania-UKRAINE-REPUBLIC OF MOLDOVA 2007-2013, Training seminar for Grant beneficiaries, 25 Martie 2013, BRCT Iasi
    - Training *"How to write a successful Horizon 2020 project"*, în cadrul proiectului *"Dezvoltarea capacității de inovare și creșterea impactului cercetării de excelență la UAIC"*, Iasi, 23-24.05.2019.
  - ◆ Training stages – abroad:
    - Marine Biology training stage within the Department of Oceanography, Univ. Southampton, United Kingdom, 2 July - 13 August 1994
    - meeting of the Science shop coordinators - Groningen, The Netherlands, June 1999

- intensive course *Training in European Affairs*, Bruxelles, December 2000
- SOCRATES-ERASMUS mobility at: Liège (Belgium) May 1999; Santiago de Compostela (Spain) June 2000; Vigo (Spain) September 2002, September 2003, September 2005, May 2015, May 2017; Konstanz (Germany) July 2004, February 2012; Thessaloniki (Greece) February-March 2012; Elazig (Turkey) February 2013; Huelva (Spain) September 2013; Nigde (Turkey) February 2014; Nicosia (Cyprus) September 2015; Bifrost (Iceland) May 2016; Torino (Italy) April 2016; Tirana (Albania) June 2017; Messina (Italy) February-March 2018; Mostar (Bosnia-Herzegovina) March 2018; Podgorica (Montenegro) May 2018; Bizerte (Tunis) February 2019; Athens (Greece) April 2019; Cairo (Egypt) May 2021; Nis (Serbia) May 2022; Fez (Morocco) February 2023; Messina (Italy) February-March 2023.
- SIL Working Group on Conservation and management of running waters, Lahti (Finland), 9 August 2004
- SIL Working Group on Aquatic Invasive Species, Lahti (Finland), 9 August 2004
- Corfu Summer School *The European University: Identity, Convergence and Assessment*, Corfu, Greece, 12-16 June 2007
- Limnological-ecological Summerschool, Konstanz, Germany, August-September 2007
- Limnological-ecological Summerschool, Konstanz, Germany, August-September 2010
- *Ecological state of the lake Durowskie during restoration measures* Summerschool, Poznan and Wagrowiec, 3-17 July 2011, 1-15 July 2012, 30 June-14 July 2013
- *Danube Water Net Workshop in Zagreb*, Energetski Institut Hrvoje Požar, ZAGREB, 28-29 martie 2019
- *Ecological state of the lake Durowskie during restoration measures* Summerschool, Poznan and Wagrowiec, 26 June-03 July 2022.

### PERSONAL SKILLS AND COMPETENCES

- biographic data included in Index of experts in Ecology and related fields from Romania, author Ioan Caraus, Edit. Ion Borcea, Bacau, 2002, ISBN 973-98455-9-2
- member of the jury of the National Contest for environmental projects since 2003
- evaluator expert for new research projects CNCSIS since 2004
- evaluator expert for Research Centres since 2006
- evaluator for abroad scholarships candidates, for the Ministry of Education and Research since 2006
- evaluator expert for the national authority RENAR since 2007
- Environmental Audit expert since 2010
- Project Manager expert since 2010
- Expert in the elaboration of studies and environmental reports, registered with the Ministry of Environment, Water and Forests since 2016.

Mother tongue(s) **Romanian**

Other language(s)

Self-assessment

European level (\*)

**English**

**French**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C2	Experimented user	C2	Experimented user	C2	Experimented user	C2	Experimented user	C2	Experimented user
B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user

(\*) Common European Framework of Reference for Languages

TECHNICAL ABILITIES AND PROFICIENCIES

(Computer skills and competences)

medium - Word, Excel, Powerpoint, Quattro Pro, Internet  
use of laboratory equipment and field equipment  
Driving licence: category B  
Master scuba diver since 2010.

Social skills and competences

Communication skills, sociability, flexibility, spontaneity, sports skills, organizational spirit, ambition, perseverance and adaptability

OTHERS:

(Organisational skills and competences)

- **SOCRATES-ERASMUS** Coordinator for the Faculty of Biology (1998-2004, 2009-2012)
- Coordinator of the Information and Research Centre for Civil Society **InterMediu**, Alexandru Ioan Cuza University of Iasi, 1999-2000, 2002-2005
- member of the Director Council of **Centre for European Studies** Iasi (1999-2000)
- Institutional coordinator of the European network for environmental education **ESSENCE Plus** (since

1999)

- secretary of the NGO *Association for Ecology Iasi* (1999-2002)
- secretary of the NGO *Intermediunet Foundation Romania* (INRO) 2003-2005

**MEMBER IN HABILITATION COMMITTEES: member of the specialized scientific council - Institute of Zoology, Republic of Moldova, from 2019**

**MEMBER OF DOCTORAL THESIS COMMISSIONS:**

**Referent:** University of Bucharest: since 2009, *Alexandru Ioan Cuza* University of Iasi: since 2009, *Dunarea de Jos* University of Galati: since 2012, *Gheorghe Asachi* University of Iasi since 2015.

**MEMBER OF EDITORIAL BOARD/ SCIENTIFIC ADVISOR FOR PUBLICATIONS**

- Member of the Editorial Board of *Annals of Alexandru Ioan Cuza University Iasi*, Fasc. of Animal Biology since 2005
- Member of the Editorial Board of *International Journal of Conservation Science* since 2012
- Member of the Editorial Board of *Journal of Survey in Fisheries Sciences* since 2013
- Member of the Editorial Board of *Environmental Engineering and Management Journal* since 2023.

- reviewer for **(ISI quoted)** scientific journals:

- *Journal of Oceanological and Hydrobiological Studies* since 2006
- *Environmental Monitoring and Assessment Journal* since 2007
- *Boreal Environment Research* since 2014
- *Ecological Engineering*, *The Journal of Ecosystem Restoration* since 2015
- *Ecotoxicology and Environmental Safety* since 2015
- *Proceedings of National Academy of Sciences, India Sect. B: Biological Sciences* since 2015
- *Environmental Science and Pollution Research* since 2016
- *International Journal of Phytoremediation* since 2016
- *Ecological Indicators* since 2017
- *Bulletin of Environmental Contamination and Toxicology* since 2018
- *Science of the Total Environment* since 2018
- *Environmental Toxicology and Pharmacology* since 2019
- *International Journal of Environmental Analytical Chemistry* since 2019
- *Journal of Cleaner Production* since 2019
- *Water* since 2020
- *Turkish Journal of Zoology* since 2020
- *Applied Sciences* since 2020
- *Antioxidants* since 2021
- *Molecules* since 2021
- *Aquatic Toxicology* since 2021
- *Journal of Environmental Sciences* din 2022
- *Comparative Biochemistry and Physiology, Part C (Toxicology and pharmacology)* since 2022
- *Toxics* since 2022
- *Journal of Marine Science and Engineering* since 2022
- *Environmental Science & Technology* since 2022
- *Marine Environmental Research* since 2023.

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**LEADERSHIP EXPERIENCE:**

- member of the Council Faculty of Biology (1995-2003)
- head of Department: Chair of Zoology-Ecology (2005)
- member of the "*Alexandru Ioan Cuza*" University Senate (2000-2003, 2005-2008)
- general chancellor of the "*Alexandru Ioan Cuza*" University, Iasi (2005-2008)
- Dean of the Faculty of Biology Iasi (2012-2016)
- Director of the "*Prof. dr. Ioan Borcea*" Marine Biology Research Unit from Agigea-Constanta (2011-2018)
- Director of the Doctoral School of Geosciences, "*Alexandru Ioan Cuza*" University, Iasi (since 2022).

SCIENTIFIC ACTIVITY  
(see APENDICES)

- books – **14**; academic courses – **3**; scientific papers in specialty journals – **196**;
  - **157** studies and articles published in full; **51** papers in ISI rated journals.
  - **39** abstracts, **25** abroad (in volumes of international scientific events)
  - **18** papers of science communication.
- Hirsch Factor (**h-index**): WoS (**16-885** citations); Scopus (**16-964** citations), Google Scholar (**19-1456** citations) <https://erris.gov.ro/ECOTOXICOLOGY-AND-ANIMAL-BEH>
- Patents:** Strungaru Ștefan-Adrian, Plavan Gabriel Ionuț, Nicoară Mircea Nicușor, 2022, **Method of obtaining a product with high nutritional value for feeding ornamental golden carp (*Carassius auratus* L.)** IPC: **A23K50/80** CPC: **Y02A40/818**

OTHER ACTIVITIES

**MEMBER OF THE INTERNATIONAL RESEARCH TEAMS:**

- British-Romanian joint expedition on Razim-Sinoe Lagoon and Black Sea's shore (from Portita to Periboina), Biodiversity Study 1995-1996, coordinator Dr. Martin Sheader
- Romanian-Dutch project *Water pollution in lakes in the Netherlands and Romania*, 2000, coordinator Dr. Henk Mulder (MATRA Programme)
- Romanian-Swiss project *Persistent Organic Pollutants in River Bahlui*, responsible Prof. dr. Felipe de Alencastro, University of Lausanne, Switzerland, 2004-2007 (ESTROM Programme)
- Cross-boundary project *RESOURCES PILOT CENTRE FOR CROSS-BORDER PRESERVATION OF THE AQUATIC BIODIVERSITY OF PRUT RIVER, 2012-2015* (Joint Operational Programme Romania-Ukraine-Republic of Moldova 2007-2013).
- Project *EUROPEAN RAPTOR BIOMONITORING FACILITY (ERBFacility)* (Acțiunea COST CA 16224), 2017-2018, funded by International Programme COST.

**MEMBER OF NATIONAL SCIENTIFIC SOCIETIES:**

- Romanian Society of Ecology - **RES**
- Romanian Society of Limnology – **SLR**.

**MEMBER OF INTERNATIONAL SCIENTIFIC SOCIETIES:**

- International Society of Limnology - **SIL**
- Freshwater Biological Association – **FBA**
- IUCN Academy of Environmental Law - **IUCNAEL**.

**MEMBER OF THE SCIENTIFIC COMMITTEE OF INTERNATIONAL SCIENTIFIC EVENTS:**

- XV<sup>th</sup> International Symposium of Entomofaunistic for Central Europe (**SIEEC**), Iasi, 22-27 Sept. 1996
- International Summerschool for Archaeozoology, Iasi 2003
- International conference Intermediunet Romania "For promotion of the sustainable partnership between universities and civil society", Brasov 9-11 June 2004
- Limnological–ecological Summerschool, Konstanz 2007, 2010
- *Ecological state of the lake Durowskie during restoration measures* Summerschool, Poznan and Wagrowiec, 3-17 July 2011, 1-15 July 2012, 30 June-14 July 2013
- International scientific session *The Anthropogenic Impact Upon Black Sea Region Biodiversity*, Agigea-Constanta, 21-22 October 2011
- 7<sup>th</sup> International Conference on Environmental Engineering and Management (ICEEM07), 18-21 September 2013, Wien
- 8<sup>th</sup> International Conference of Zoologists „Actual problems of protection and sustainable valorification of the animal world diversity”, Institute of Zoology - Academy of Science of Republic of Moldova, 10-12 October 2013, Kishinev
- International symposium *Biodiversity without borders*, Iasi, October 2014, 2015
- The 9<sup>th</sup> International Conference on Environmental Engineering and Management (ICEEM09) *Circular Economy and Environmental Sustainability*, 6–9 September 2017, Bologna, Italia
- 10<sup>th</sup> International Conference on Environmental Engineering and Management (ICEEM10), 18-21 September 2019, Iasi, Romania
- *Ecological state of the lake Durowskie during restoration measures* Summerschool, Poznan and Wagrowiec, 27 June-03 July 2022.

**ORGANIZATION OF SCIENTIFIC EVENTS AND SEMINARS:**

- National Congress of Biology *Emil Racovita*, Iasi, 16-20 Sept. 1992
- Scientific session *Black Sea in balance*, Constanta, 18-20 Oct. 1996
- Symposium of scientific communications for students "Romania in the integration perspective", dedicated to Europe Day, Iasi, 8-9 Mai 2001
- *Romania - European integration and the Stability Pact for South - East Europe*, Iasi, 9 Mai 2001
- *European Studies and the regional development – opportunities and perspectives*, Iasi, 9 Mai 2001
- Scientific session *Life in water and on earth*, Agigea - Constanta, 19-20 Oct. 2001
- Scientific session *Biology at the beginning of the XXIst century*, Iasi, 13-14 November 2004
- Limnological–ecological Summerschool, Potoci, 2006
- National Conference *Ecology and evolutionism: origins, development and perspectives*, 22-24 Oct. 2009, Galati
- International scientific session *The Anthropogenic Impact Upon Black Sea Region Biodiversity*, 21-22

Oct. 2011 Agigea-Constanta

- *Interregional symposium Brancusi – spirit and creation*, 5<sup>th</sup> Ed. (CAER 2012 no. 622), Iasi 25.05.2012
- *International symposium of Ecology „Green means life” 2<sup>nd</sup> Ed.*, Iasi, 27.05.2012
- Scientific session, October 2012, 2013, 2014, 2015, 2016, 2017 Iasi, Romania: *Anthropogenic impact upon the structural and functional diversity of the biological systems.*

21.03.2023

**Prof. Dr. Habil. Mircea Nicusor NICOARA**

