#### CURRICULUM VITAE – TANJA PIPAN

#### I. Basic Data

#### **Education:**

1977-1985: Primary School Miroslav Vilhar, Postojna.

1985-1989: High School of Natural Sciences and Mathematics, Postojna.

1989-1995: B.Sc. in Biology, Department of Biology, Biotechnical Faculty, University of Ljubljana.

1995-1999: M.Sc. in Biology, Department of Biology, Biotechnical Faculty, University of Ljubljana.

1999-2003: Ph.D. in Biology, Department of Biology, Biotechnical Faculty, University of Ljubljana.

# **Employment, scientific-research titles:**

1995-2003: Young researcher - Research Assistant at ZRC SAZU Karst Research Institute.

2003-2007: Research Fellow at ZRC SAZU Karst Research Institute.

2007-2012: Senior Research Fellow at ZRC SAZU Karst Research Institute.

2012-: Research Advisor at ZRC SAZU Karst Research Institute.

# **Teaching position:**

# **Supervising:**

Mentor of Ph.D. student (UNG, Karstology): N. Baković (in progress, enroll 2019/2020).

Mentor of Ph.D. student and young researcher (UNG, Karstology): L. Valentić (in progress, enroll 2018/2019).

Mentor of Ph.D. student (UNG, Karstology): M. Škrlj Manojlović (in progress, enroll 2017/2018).

Commison member for Master thesis of student Mariana Guadalupe Negrete Macías (Universidad de Quintana Roo, Unidad Académica Cozumel): 2019: Identification of indicators used to determinate carrying capacity in subterranean systems.

Mentor of Ph.D. student and young researcher (UNG, Karstology): P. Kozel (2018): Ecological evaluation of aquatic and terrestrial subterranean fauna in a karst cave: dissertation. Nova Gorica: [P. Kozel], 2018. XVI, 130 str., ilustr. [COBISS.SI-ID 5086459].

Mentor of Ph.D. student (UNG, Karstology): F. Papi (2016): Ecological studies of epikarst communities in Alpine and Pre-Alpine caves: dissertation. Nova Gorica: [F. Papi], 2016. II, 122 str., ilustr. [COBISS.SI-ID 40129837].

Mentor of postgraduate student (UNG, School of Environmental Sciences): L. Valentić (2018): Analiza mikroplastike v izbranih površinskih in podzemeljskih kraških vodah = Microplastics analysis in selected surface and underground karst waters: master thesis Nova Gorica: [L. Valentić], 2018. X, 51 str., ilustr. http://repozitorij.ung.si/Dokument.php?id=17289. [COBISS.SI-ID 5203451]

Mentor of undergraduate student (UNG, School of Environmental Sciences): M. Ferfolja (2016): Fizikalna, kemijska in biološka analiza reke Idrijce od izvira do izliva = Physical, chemical and biological analysis of the River Idrijca from its source to its outflow: diploma. Nova Gorica: [M. Ferfolja], 2016. XII, 48 str., [2] str. pril., ilustr. http://repozitorij.ung.si/IzpisGradiva.php?id=2585. [COBISS.SI-ID 4520955].

Mentor of undergraduate student (UNG, School of Environmental Sciences): M. Pečnik (2015): Inventarizacija vodne favne v izbranih jamah na Kočevskem = Inventory of aquatic fauna in selected caves in Kočevska region : diploma. Nova Gorica: [M. Pečnik], 2015. VIII, 51 str., ilustr. http://repozitorij.ung.si/IzpisGradiva.php?id=1996. [COBISS.SI-ID 4045819].

Co-mentor of postgraduate student (UM, Faculty of Natural Sciences and Mathematics): P. Kozel (2013): Preference dvozobih črnink Nemastoma bidentatum ssp. (Arachnida: Opiliones: Nemastomatidae), do različno komprimiranih substratov = Preference of Nemastoma bidentatum ssp. (Arachnida: Opiliones: Nemastomatidae) for different substrate compation: master thesis. Maribor: [P. Kozel], 2013. X, 66 f., ilustr. https://dk.um.si/IzpisGradiva.php?id=41088. [COBISS.SI-ID 35819053].

Co-mentor of undergraduate student (UM, Faculty of Natural Sciences and Mathematics): V. Navodnik (2007): Favna vodnih curkov v jami Hudi luknji pri Doliču = Fauna of dripping water in the cave Huda luknja: diploma. Maribor: [V. Navodnik], 2007. XI, 95 f., ilustr. [COBISS.SI-ID 15691272].

Mentor of student in the frame of »Leonardo da Vinci« programme: F. Papi (25. 9. 2006-6. 3. 2007). Mentor of student in the frame of Grant for foreign researchers at ZRC SAZU: F. Papi (2007).

Mentor of Ph.D. student in the frame of »Ad futura, The Slovene Human Resources Development and Scholarship Fund« programme: F. Papi (2007-2010).

# **Courses taught:**

- 2005-: Karst ecology, Speleobiology (course leader and lecturer), Graduate programme Karstology, University of Nova Gorica, III. level.
- 2005-: Module Karst (team taught), Faculty of Humanities, University of Primorska, I. level.
- 2010-: General Biology (course leader and lecturer), School of Environmental Sciences, University of Nova Gorica, I. level.
- 2011-2014: Environmental Monitoring (team taught), School of Environmental Sciences, University of Nova Gorica, I. level.
- 2011-: Karst Hidrology and Ecology (team taught), Faculty of Humanities, University of Primorska, II. level.
- 2011-: Selected Topics of Karst Ecology (course leader and lecturer), Faculty of Natural Sciences and Mathematics, University of Maribor, II. and III. level.
- 2014-: Introduction to karstology (team taught), Graduate programme Karstology, University of Nova Gorica, III. level.
- 2015-: Shallow subterranean habitats: ecology, evolution and conservation (course leader and lecturer), School of Environmental Sciences, University of Nova Gorica, II. level.
- 2016-: Selected topics in conservation biology and biogeography (course leader and lecturer), School of Environmental Sciences, University of Nova Gorica, I. level.

## Member of the academic society and editorial board:

- 1995-: Member of the Karstological Society Anthron.
- 2000-: Member of the International Society for Subterranean Biology: Societéte Internationale de Biospéologie (SIBIOS).
- 2010-2016: Member of the executive board of the International Society for Subterranean Biology: Societéte Internationale de Biospéologie (SIBIOS).
- 2010-2017: Treasurer of the International Society for Subterranean Biology: Societéte Internationale de Biospéologie (SIBIOS).
- 2011-: Editor for the field of biology and speleobiology of the scientific journal with an IF *International Journal of Speleology*.
- 2017-: Governmental nomination as a Slovene representative in the European Strategy Forum on Research Infrastructures (ESFRI) and in the Strategic Working Group for the field of Environment (ENV SWG).

# II. Detailed information on scientific work

# **Academic titles:**

- 2005-2010: Assistant Professor of Karstology, University of Nova Gorica.
- 2010-2015: Assistant Professor of Biology, University of Nova Gorica.
- 2015-2020: Associate Professor of Biology, University of Nova Gorica.
- 2011-2023: Elected member of the Senate of School of Environmental Sciences, University of Nova Gorica.
- 2012-2016: Elected member of the Scientific committee at the Karst Research Institute ZRC SAZU.
- 2012-: President of the commission for master defences, School of Environmental Sciences, University of Nova Gorica.
- 2013-: Member and president (since 2014) of the commission for students affairs, School of Environmental Sciences, University of Nova Gorica.
- 2013-: Deputy director of the graduate academic programme Karstology, III. level, University of Nova Gorica.
- 2013: Member of the school mature commission, National examination center.
- 2014: Member of the commission for renovation of programme Environment I. and II. level, School of Environmental Sciences, University of Nova Gorica.

2013-2014: Consultant in the preparation of the programme for creation a UNESCO Chair on Karst Education, Graduate School, Karstology, III. level, University of Nova Gorica.

2016-2020: President of the commission for grants and awards at ZRC SAZU.

# Awards, grants:

2003: Grant for the most significant young researcher at ZRC SAZU for scientific work.

2004: The SIBIOS (Société Internationale de Biospéologie) prize for the best presentation during the XVIIth International Symposium of Biospeleology at Raipur, India.

2004: Grant awarded for the most promising young scientist at the Trans-KARST 2004 International Transdisciplinary Conference on Development and Conservation of Karst Regions at Ha Noi, Vietnam.

2004: Elected head and coordinator of Slovenia LTER (Long-Term Ecological Research) network.

2005: Grant from the Slovenian Science Foundation for the advanced scientific study in the USA.

2005-2006: Grant from the Word Federation of Scientists (WFS), National Scholarship Programme.

2005: Grant from UNESCO IGCP Project 513 "Global Study of Karst Aquifers and Water Resources" for an interesting and innovative project presented at the Cvijic karst 2005 Conference in Belgrade and Kotor.

2007: Karst Waters Institute "Distinguished Service Award" for service on the Time in Karst symposium, Postojna, Slovenia.

2015: Nominated by UNG and ZRC SAZU for the Miroslav Zei Award for Outstanding Achievements at NIB in 2015.

2016: The recipient of the ZRC SAZU Gold Award for top scientific research results.

2017: Selected by a panel of experts on the list of 50 Ona Plus žensk/women.

2018: Selected by the expert commission at the first reception of scientists at the President of the Republic of Slovenia, Borut Pahor (11. 1. 2018).

## Scientific synergistic activities abroad:

American University, Washington DC, USA (2003-2007, 2009-2018, every year).

Karst Waters Institute, Leesburg, Virginia, USA (2004).

Virginia Museum of Natural History, Martinsville, Virginia, USA (2005, 2006).

Institute of Speology "Emil Racovitza", Cluj-Napoca, Romania (2006).

Universidad de La Laguna, Departamento de Biología Animal, La Laguna, Spain (2009).

Université Paul Sabatier, Toulouse, France (2010).

Institute of Entomology, Biology Centre ASCR, Češké Budějovice, Czech Republic (2011).

Altaisky State Nature Biosphere Reserve, Gorno-Altaisk, Russia (2011, 2013-2019, every year).

National University of Ireland, Department of Botany, Galway, Ireland (2012).

Université Lyon 1, Laboratoire d'Ecologie des Hydrosystèmes Naturels et Anthropisés, Lyon, France (2012).

Instituto do Carste, Belo Horizonte, Brazil (2013).

International Joint Research Centre for Karstology and Yunnan International Karst Environmental Laboratory at the Yunnan Institute for Geography, Yunnan University, Kunming, China (2006, 2017, 2019).

División de Desarrollo Sustentable, Lab. de Bioespeleología y Carcinología, Universidad de Quintana Roo, Mexico (2015-2019, every year).

# Invited lecture at the international conference:

Diversity and peculiarity of epikarst fauna: case study from six caves in Slovenia (Europe). *Epikarst*, 1.-4. October, 2003, Shepherdstown, West Virginia, USA.

Convergence and divergence in the subterranean realm: a reassessment. 21st International Conference on Subterranean Biology, 2-7 September, 2012, Košice, Slovakia.

Organic carbon in aquatic shallow subterranean habitats (SSHs). 21st International Conference on Subterranean Biology, 2-7 September, 2012, Košice, Slovakia.

Convergence and divergence in caves and shallow subterranean habitats. *Karst Waters Institute Symposium on Carbon and Boundaries in Karst*, January 7 to 11, 2013, Carlsbad, New Mexico, USA.

Patterns of organic carbon in shallow subterranean habitats (SSHs). *Karst Waters Institute Symposium on Carbon and Boundaries in Karst*, January 7 to 11, 2013, Carlsbad, New Mexico, USA.

Ecological and evolutionary classification of subterranean organisms. *ARPHA* Conference Abstracts, ISSN 2603-3925, 19. September 2018, 1, e29878. https://aca.pensoft.net/articles.php?id=29878, doi: 10.3897/aca.1.e29878.

# Lectures at the foreign Universities:

The biology of caves and other subterranean habitats: invited lecture, 14 September, 2017, State University Gorno Altaisk, Altai Republic, Russia.

The biology of caves and other subterranean habitats: invited lecture at the Instituto do Carste, Belo Horizonte, Brasil, 28 October, 2013, in the frame of Seminário Interno de Biospeleologia 2013.

Intermediate-sized terrestrial shallow subterranean habitats: invited lecture at the Instituto do Carste, Belo Horizonte, Brasil, 29 October, 2013, in the frame of Seminário Interno de Biospeleologia 2013.

# Plenary/introductory lecturer at the international conference:

Epikarst - an emerging biodiversity hotspot. XVIIIth International Symposium of Biospeleology, 10-15 July, 2006, Clui-Napoca, Romania.

Shallow subterranean habitats: patterns and processes. Biospeleology Congress, 2 plenary. 7-9 April, 2017, Cagliari, Sardinia, Italy.

# III. Leading and organizing abilities

## Leading of national and European research projects (selection):

National coordinator at EU project eLTER PPP: Integrated European Long-Term Ecosystem, Critical Zone and Socio-Ecological Research Infrastructure; Preparatory Phase Project, Horizont 2020, 2020 - 2025.

National coordinator at EU project eLTER PLUS: European long-term ecosystem, critical zone and socio-ecological systems research infrastructure PLUS, Horizont 2020, 2020 - 2025.

National coordinator at project Development of research infrastructure for the international competitiveness of the Slovenian R&D area – RI-SI-2 LifeWatch, Ministry of Education, Science and Sport, 2019-2021.

Slovenian representative appointed to the European Strategic Forum for Research Infrastructures (ESFRI) and strategic working group on the environment (ENV SWG), 2016.

National coordinator at EU project eLTER – Long-Term Ecosystem and socio-ecological Research Infrastructure, Horizont 2020, 1. June 2015 till 31.

National coordinator at EU project Advance\_eLTER – Advancing the European Long-Term Ecosystem, critical zone and socio-ecological Research Infrastructure towards ESFRI, Horizont 2020, 1. January 2017 till 31. December 2017.

»LIFE KOČEVSKO: LIFE13 NAT/SI/000314: HT 8310 - Caves not open to the public and *Proteus anguinus*. Biological inventory of the cave fauna and preparation of reports before the cave remediation and after the cave remediation (monitoring) and preparation of reports, 2015-2019.

Fauna in drip pools of Škocjan caves, Skocjan Caves Public Institute, Slovenia, 2015.

Promotion of Slovene science abroad: Karstology in Altai Mountains - transfer of knowledge from classical karst in Slovenia to Russia, 2013-2015.

CLIMAPARKS – Ecological assessment and establishment of monitoring of percolation water in the Škocjanske jame system, OP ITA-SLO, 2011-2013.

Information and technology network for integration of long-term ecological, biodiversity and socio-economic studies in karst, ARRS project, 2008-2011.

National coordinator at EU project LifeWatch – e-Science and Technology Infrastructure for Biodiversity Data and Observatories, 7th FP. Nine partners are included in the National Consortium LifeWatch-SI.

National coordinator at EU network project LTER – Long Term Ecological Research, 6th FP, since 2004-.

#### Participation at programmes, basic and applied projects (selection):

- Raziskovanje krasa / Karst Research, ARRS program, 2009-2019.
- Karstology research for the sustainable use of the Škocjan Caves as a World Heritage Site, ARRS project, 2017-2020.
- Environmental change and karst water resources: impacts, vulnerability and land use adaptations. ARRS project, 2017-2020.
- Natural resources of karst tourist caves: a balance among protection, exploitation and promotion. ARRS project, 2016-2018.
- Development and application of a method for quantitative and qualitative evaluation of karst water resources. ARRS project, 2016-2019.
- ŽIVO!: Life Water!, OP IPA Slovenia-Croatia, 2007-2014. in the frame of trans-boundary programmeSlovenia-Croatia (IPA CBC SI-HR 2007-2014).
- Monitoring and analysis of selected climatic parameters in karst caves: The case of Postojna cave system; 2009-2012; Postojnska jama, Turizem KRAS.
- Ocena stanja in vzpostavitev monitoringa v prenikli vodi Assessment of the status and establishment of monitoring in dripping water; Park Škocjanske jame.
- Hydrogeological monitoring for the second track of the railway line Divača Koper; GI ZRMK, Ljubljana.
- Performing expert works for the needs of the Postojna Cave Exhibition Pavilion; Postojnska jama, Turizem KRAS.
- Preparation of a study on the impact of the former Globovnik landfill in Ilirska Bistrica on the Škocjan Caves, mainly on qualifying species from the Natura 2000 list. ProVITA Inženiring, Ilirska Bistrica, 2018
- IGCP UNESCO Project No. 661 Critical zones in karst systems (2017-2021), Urad za UNESCO. Speleo(bio)logical assessment of the cave Polhova jama. MORS, 2018.
- Methodology for sustainable use of tourist caves by automatic measurement A Case Study Postojna Cave, ARRS project, 2018-2021.
- Impact assessment of planned interventions on the Škocjan Caves as part of the project of regulating the drinking water supply of Slovenian Istria and the catchement karst area; Inštitut za ekološki inženiring, d.o.o.
- Biological monitoring in the Postojna and Predjama cave systems, 2016-2019, Postojnska jama, Turizem KRAS.

# Leading of biological bilateral projects:

- Ecological and microdistributional study of an epikarst fauna partner from the USA (2004-2005). Biodiversity and ecology of fauna in percolating water of the karst caves partner from Romania (2005-2007).
- Fauna in percolation water of the karst caves as an indicator for surface pollution partner from Romania (2008-2009).
- Challenges to the standard evolutionary and biogeographic scenario superficial subterranean habitats partner from the USA (2009-2012).
- Long-term ecosystem and socio-ecological research in karst partner from USA (2015-2016).

#### Organizing of the international conferences:

- Member of the organizing committee of the International Karstological School "Classical Karst", Postojna, Slovenia (every year, 1995-2019).
- Member in the organizing committee of the international symposium Evolution of karst: From prekarst to cessation, Postojna, Slovenia, 2002.
- Organizer and member of the organizing committee of joint US-Slovenia international workshop on Long-Term Ecological Research Studies in Karst, with cooperation of National Science Foundation (NSF), Postojna, Slovenia, 2006 (co-organizer D.C. Culver).
- Organizer and member of the organizing committee of the international symposium on Time in Karst, Postojna, Slovenia, 2007 (co-organizer D.C. Culver).
- Organizer and member of the organizing committee of the 20<sup>th</sup> International Conference on Subterranean Biology, Postojna, Slovenia, 2010 (co-organizers P. Trontelj and S. Polak).

Organizer of the international symposium Shallow Subterranean Habitats, International Society of Subterranean Biology, Postojna, Slovenia, 2010 (co-organizer D.C. Culver). Member in the scientific committee of the international conference 24<sup>th</sup> International Conference on

Subterranean Biology, Aveiro, Portugal, 2018.

#### IV. **Bibliography**

# List of 10 the most important scientific works with citations (Source: Google Scholar, September 2019):

| <b>Citation indices</b> | All  | Since 2014 |
|-------------------------|------|------------|
| Citations               | 2460 | 1456       |
| h-index                 | 24   | 19         |
| i10-index               | 39   | 33         |

| Title, author  | Cited          | Year |
|--|----------------|------|
| The biology of caves and other subterranean habitats                           |                |      |
| DC Culver, T Pipan   | 596            | 2019 |
| Oxford University Press  |                |      |
| A conceptual model of the flow and distribution of organic carbon in caves     |                |      |
| KS Simon, T Pipan, DC Culver   | 114            | 2007 |
| Journal of Cave and Karst Studies 69 (2), 279-284                              |                |      |
| A framework for karst ecohydrology   |                |      |
| O Bonacci, T Pipan, DC Culver  | 110            | 2009 |
| Environmental Geology 56 (5), 891-900  |                |      |
| Shallow subterranean habitats: ecology, evolution, and conservation            |                |      |
| DC Culver, T Pipan   | 106            | 2014 |
| Oxford University Press, USA   |                |      |
| Epikarst-a promising habitat: copepod fauna, its diversity and ecology: a case |                |      |
| study from Slovenia (Europe)   | 72             | 2005 |
| T Pipan  | 1/2            | 2003 |
| Založba ZRC  |                |      |
| Superficial subterranean habitats–gateway to the subterranean realm            |                |      |
| DC Culver, T Pipan   | 71             | 2008 |
| Cave and Karst Science 35 (5), 12  |                |      |
| Convergence and divergence in the subterranean realm: a reassessment           |                |      |
| T Pipan, DC Culver   | 63             | 2012 |
| Biological journal of the Linnean Society 107 (1), 1-14                        |                |      |
| Temperature variation and the presence of troglobionts in terrestrial shallow  |                |      |
| subterranean habitats  | 62             | 2010 |
| T Pipan, H Lopez, P Oromi, S Polak, DC Culver                                  | 02             | 2010 |
| Journal of Natural History 45 (3-4), 253-273                                   |                |      |
| Estimating biodiversity in the epikarstic zone of a West Virginia cave         |                |      |
| T Pipan, DC Culver   | 51             | 2005 |
| Journal of Cave and Karst Studies 67 (2), 103-109                              |                |      |
| Morphological Differences Among Eyeless Amphipods in the Genus Stygobromus     |                |      |
| Dwelling in Different Subterranean Habitats                                    | 49             | 2010 |
| DC Culver, JR Holsinger, MC Christman, T Pipan                                 | <del>   </del> | 2010 |
| Journal of Crustacean Biology 30 (1), 68-74                                    |                |      |