

Curriculum Vitae Dr. Sc. Franziska Zemmer

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QUALIFICATIONS

07.06.22 Doctor of Science, Universidad de Córdoba, Spain in Sustainable Natural Resource Management
04.02.2025 Registro esperte in materia paesaggio della Provincia autonoma di Bolzano-Alto Adige LP n. 9, LP 10. del 10. luglio 2018
17.05.21 Registro esperte in materia natura della Provincia autonoma di Bolzano-Alto Adige LP n. 9 del 10. luglio 2018
23.03.10 MSc in Biology, Fatih University, Istanbul, Turkey
27.05.05 Cambridge University CELTA (Certificate in English Language Teaching to Adults)
17.12.02 State Exam for Biologists (Italy)
06.11.01 Mag. rer. nat. in Biology (botany and phytomedicine), Innsbruck University, Austria

POSITIONS

2008- Freelance Environmental Biologist: habitat assessments, floristic cartography, screenings, consultancies, science didactics
2019- Teaching staff in science didactics at LM-85 bis Education at Free University of Bolzano
2023 Supervision of a Master Thesis „Einfluss des Unterrichts auf die Schülervorstellungen im Bereich der Naturwissenschaften: Untersuchung von Prä- und Postkonzepten zum Begriff Honigbiene in der Grundschulunterstufe“
03.23-02.25 Researcher at Fondazione Edmund Mach, Research and Innovation Centre, Environmental Botany Unit, San Michele and the National Biodiversity Future Centre (NBFC)
06.17- 07.18 Speaker for Nature and Environment at Alpenverein Südtirol
03-06.17 Teacher in Landscape Management and Forestry at the agricultural high school Fachoberschule für Landwirtschaft (Auer, Italy)
10.14-05.16 International Projects Coordination at Fatih University Technology Transfer Office (Istanbul, Turkey)
2006 -2014 Lecturer Fatih University English Preparatory School (Istanbul, Turkey)
2002-2004 Researcher at the Museum of Natural Sciences in Bolzano (Italy)

GRANTS

Förderung aus dem Landschaftsfonds gemäß Art. 16 des Landesgesetzes vom 10. Juli 2018, Nr. 9 für das Projekt “Beweidung und händisches Entfernen als Maßnahmen zur Eindämmung von Neophyten am Etschdamm zwischen Salurn und Pfatten” getragen vom Heimatpflegeverband Südtirol 2025 CUP Nr.: B11G25000190001

COST Action CA18226 ADOPT “New approaches in detection of pathogens and aeroallergens”, STSM at the Institute of Earth Sciences, University of Évora, 25.09.2023-29.09.2023

COST Action CA18226 ADOPT Training School “Detection of Bioaerosols using mobile and low cost devices”, Lithuania, 21.-23.06.2023

Registration fee grant for ESA 6th European Symposium on Aerobiology from 18 to 22 July 2016 in Lyon, France.

Poster Grant for the XXII. National Allergy and Clinical Immunology Congress, Antalya (XXII. Ulusal Allerji ve Klinik İmmünoloji Kongresi)

COST Action FA1203 Trainee Grant 8th “Advanced Aerobiology Course” 2015

Publications

Science citation

Compagnone F., Varricchione M., Stanisci A., Ancillotto L., Angiolini C., Antonacci D. S., Badalamenti E., Bagella S., Barbato D., Bonini I., Boscutti F., Brundu G., Campagnaro T., Celesti-Grappo L., Citterio S., Costantino R., Di Febbraro M., Finizio M., Innangi M., La Mantia T., Longo F., Lozano V., Maistrello L., Mariggì A., Montagnani C., Mori E., Mugnai M., Petrillo M., Pinzani L., Raimondi S., Riveccio G., Santoianni L. A., Sebesta N., Trotta G., **Zemmer F.**, Carranza M. L. (2026). People-powered monitoring of an invasive non-native tree: citizen science improves national surveillance of *Ailanthus altissima* in Italy. *People and Nature* (submitted 17.4.2026).

Pelella E., Cantini D., Ceschin S., Pinzani L., Di Lernia D., Andreatta S., Bagella S., Barbieri G., Barni E., Bartolucci F., Behrens E., Bolpagni R., Bonini I., Boscutti F., Bouvet D., Caria M. C., Cancellieri L., Casavecchia S., D'Agostino M., de Simone L., Di Massimo S., Di Raimo L., Forte L., Giusso del Galdo G. P., Lai R., Lastrucci L., Maccherini S., Magri D., Mugnai M., Orsenigo S., Prosser F., Scoppola A., Sebesta N., Trotta G., Vallariello R., Venanzoni R., Wilhelm T., Zangari G., **Zemmer F.**, Angiolini C. (2026). Tracing plant invasions in freshwater habitats: spatial and temporal insights from herbarium metadata. *Hydrobiologia* (accepted 2.2.2026).

J. Oteros, M. Plaza, S. Gilles, O. Goksel, A. Charalampopoulos, C. Galan, C. Antunes, R. Pérez-Badia, M. Bastl, P. Beggs, J. Belmonte, J. Buters, N. Bruffaerts, A. Rodrigues-Costa, F. Cristofolini, A. Cristofori, J. Davies, B. Gedda, E. Gottardini, S. Haberle, A. Holgado, B. Keaney, B. Lara, A. Milic, H. Ribeiro, J. Rojo, O. Sozinova, I. Sauliene, F. Tummon, D. Vokou, **F. Zemmer**, A. Damialis (2025). An eaaci task force initiative for visualizing historical pollen and spore calendars in Europe. *ALLERGY*, 80 (S114): S700. <https://onlinelibrary.wiley.com/doi/10.1111/all.70138>

C Antunes, I Sauliene, F Zemmer, B Lara, S Celenk, AR Costa, C Pogner, A Galveias, A Cristofori, L Grewling, MA Penha, R Pérez-Badia, H Ribeiro, M Xhetani, P Orbik, N Gonzalez Roldan, D Magyar, N Bruffaerts, L Sukiene, S Pereira, M Lika, I Keriene, O Sozinova, M Martínez-Bracero, A Pallavicini, Z Tischner, L Muggia, V Rodinkova, AG Philliam, D O'Connor, B Muyschondt, C Skjoth (2025). Identifying bioaerosol diversity in the atmosphere of Vilnius, Lithuania, by molecular methods: hints to clarify human bio-exposome. *ALLERGY*, 80 (S114): S561-S562. doi: 10.1111/all.70138 handle: <https://hdl.handle.net/10449/95616>, <https://onlinelibrary.wiley.com/doi/10.1111/all.70138>

Tummon F., Bastl K., Bastl M., Beggs P. J., Belmonte J., Bruffaerts N., Charalampopoulos A., Clot B., Cristofori A., Crouzy B., Damialis A., Erb S., Galan C., Graf E., Haus J., Koch K., Lieberherr G., Lbadaoui-Darvas M., Meurville M.-P., Niederberger E., Oteros J., Pérez-Badia R., Ribeiro H., Schwendimann A., Sikoparija B., Skjoth C., Smith M., Sofiev M., Sozinova O., Sukiene L., Vasilatou K., Verstraeten W. W., Zeder Y., **Zemmer F.** (2025). Recommended terminology for aerobiological studies: automatic and real-time monitoring methods. *Aerobiologia* 41, 847–853 (2025). <https://doi.org/10.1007/s10453-025-09879-5>

Zemmer F., Cristofori A., Cristofolini F., Gottardini E. (2024). Aerobiology in Alpine Environments: Exploring Pollen Biodiversity and its Impacts on Human Health. *Science of the Total Environment* <https://doi.org/10.1016/j.scitotenv.2024.176908>.

Zemmer F., Dahl A., Galan C. (2022). The duration and severity of the allergenic pollen season in Istanbul, and the role of meteorological factors. *Aerobiologia* DOI: 10.1007/s10453-022-09742-x

Zemmer F., Cenk E., Dahl A., Galan C., & Ozkaragoz F. (2021). A multidisciplinary approach of outdoor aeroallergen selection for skin prick testing in the geographical area of Greater Istanbul. *European Annals of Allergy and Clinical Immunology*. <https://doi.org/10.23822/EurAnnACI.1764-1489.188>

Sikoparija B., Galán C., Smith M., **EAS QC Working Group.** (2017) Pollen-monitoring: between analyst proficiency testing. *Aerobiologia*, DOI: 10.1007/s10453-016-9461-3

Zemmer F., Karaca F., Ozkaragoz F. (2012). Ragweed pollen observed in Turkey: Detection of sources using back trajectory models. *Science of the Total Environment*.

Book chapter

Zemmer F. (2023) Natur im Wandel. In: Heimatpflegeverein Margreid (Ed.), *Margreid durch die Jahrhunderte*. Athesia. ISBN 978-88-6839-686-2, pp. 58-77

Zemmer F. & Ozkaragoz F (2023). Aerobiology in the clinics of pollen allergy. In: Ö. Özdemir (Ed.), *Allergic Disease - New Developments in Diagnosis and Therapy*. IntechOpen. ISBN 978-1-80356-846-1

Zemmer F., (2018). Von den Alpengärten zum Referat für Natur und Umwelt. *Forschung und Naturschutz im Alpenverein*. In: 150 Jahre Alpenverein in Südtirol, (pp. 188-195). Bozen, Italy: Alpenverein Südtirol. ISBN 978-88944018-0-6

Peer reviewed

Wilhelm T., Spögler E., **Zemmer F.**, Sölva E., Stifter S., Faltner F., Larcher M., Leitner G., Tratter W., Winkler J., Lorenz R., Aichner G., Bachmann R. †, Ebert M., Fink M., Frener G., Gibitz L., Hilpold A., Holzer B., Kiebacher T., Lanthaler A., Mair W., Mair P., Merli M., Obrist E., Rinner A., Wirth H. (2024)

Ergänzungen und Korrekturen zum Katalog der Gefäßpflanzen Südtirols (12) *Gredleriana* 25, pp. DOI: 10.5281/zenodo.13906798

Wilhelm T., Spögler E., Tratter W., Solva E., Leitner G., Aichner G., Holzer B., Bachmann R., Fundneider A., Merli M., **Zemmer F.**, Koegl C., Hilpold A., Stockner

W., Ebert M., Geurden JN., Mallaun, Prosser F., Rohweder F. & Schweigkofler, H. (2023). Ergänzungen und Korrekturen zum Katalog der Gefäßpflanzen Südtirols (11) *Gredleriana* 23, pp. 33-43
https://www.zobodat.at/pdf/Gredleriana_017_0029-0038.pdf

Mair P., Faltner F., Tratter W. & **Zemmer F.** (2023.) Neue und bemerkenswerte Moosfunde für Südtirol (Provinz Bozen, Italien). III. *Gredleriana* 23, pp.17-26

Wilhelm T., Bachmann R., Hilpold A., Leitner G., Spögler E., Da Pozzo, M., Hackhofer J., Sölva E., Stockner W., **Zemmer F.**, Aichner G., Fundneider C. et al. (2021). Ergänzungen & Korrekturen zum Katalog der Gefäßpflanzen Südtirols (10). *Gredleriana* 21, 49-76 <https://doi.org/10.5281/zenodo.5592357>

Wilhelm T., Spögler E., Hackhofer J., **Zemmer F.**, ... Tratter W. (2020). Ergänzungen und Korrekturen zum Katalog der Gefäßpflanzen Südtirols (9). *Gredleriana* 20, 29-55 <https://doi.org/10.5281/ZENODO.4245024>

Wilhelm Th., Aichner G., Argenti C.,....**Zemmer F.** (2018) Ergänzungen und Korrekturen zum Katalog der Gefäßpflanzen Südtirols (8) *Gredleriana* 18, 5-16.
https://www.zobodat.at/pdf/Gredleriana_018_0005-0016.pdf

Zemmer F. (2014). Update on airborne ragweed monitored in Istanbul, Third International Ragweed Conference, Rho (MI), Italy, GEA Giornale Europeo di Aerobiologia - European Journal of Aerobiology and Environmental Medicine

Zemmer F. (2006). Flora der Entwässerungsgräben im Südtiroler Etschtal (Provinz Bozen, Italien). *Gredleriana* 6, 199 - 230.
https://www.zobodat.at/publikation_articles.php?id=142545

Mair P. & **Zemmer F.** (2004). Vegetationskundliche Untersuchungen an der Etsch zwischen Meran und Salurn (Südtirol). *Gredleriana* 4: 19 - 54.
https://www.zobodat.at/publikation_articles.php?id=142499

Wilhelm T., **Zemmer F.**, Beck R., Stockner W. & Tratter W. (2004). Vascular plants new to the flora of South Tyrol (Prov. of Bolzano, Italy): Results of floristic mapping, mainly from the period 2002-2003. *Gredleriana* 4 (in German)

Conferences

- 19.-21.04.2026 Gottardini, E., Cristofolini, F., **Zemmer, F.**, Micheletti, D., & Cristofori, A. Airborne pollen biodiversity in Alpine sites: complementing optical microscopy and eDNA. *Terzo Forum Nazionale della Biodiversità Napoli, Italy*
- 14.-16. 04. 2026 **Zemmer, F.**, Cristofori, A., Cristofolini, F., Gottardini, E. Does the airborne pollen spectrum of Alpine sites reflect local vegetation? *84th International Scientific Conference of the University of Latvia: The University of the Future: Impact-Driven Leadership, Riga, Latvia (online presentation) https://hdl.handle.net/10449/95675*
- 12.-14.11. 2025 Compagnone F., Varricchione M., Stanisci A., Ancillotto L., Angiolini C., Antonacci D.S., Badalamenti E., Bagella S., Barbato D., Boscutti F., Brundu G., Campagnaro T., Celesti-Grapow L., Citterio S., Di Febbraro M., Finizio M., Innangi M., La Mantia T., Lozano V., Maistrello L., Mariggìo A., Montagnani C., Mori E., Mugnai M., Petrillo M., Pinzani L., Raimondi S., Riveccio G., Sebesta N., Trotta G., **Zemmer F.**, Carranza M.L. AilantItaly: Citizen Science in Action Against a Species of European Union Concern, *Ailanthus altissima* (Mill.) Swingle. *II International Symposium on Biodiversity and Ecosystem Functions under Global Change, Alghero (Poster)*
- 17.-19.09.2025 Compagnone F., Varricchione M., Stanisci A., Ancillotto L., Angiolini C., Antonacci D.S., Badalamenti E., Bagella S., Barbato D., Boscutti F., Brundu G., Campagnaro T., Celesti-Grapow L., Citterio S., Di Febbraro M., Finizio M., Innangi M., La Mantia T., Lozano V., Maistrello L., Mariggìo A., Montagnani C., Mori E., Mugnai M., Petrillo M., Pinzani L., Raimondi S., Riveccio G., Sebesta N., Trotta G., **Zemmer F.**, Carranza

- M.L., Citizen Science in action: tracking species of European Union concern through the "AilantItaly" project. *XXXIV Congresso Nazionale della Società Italiana di Ecologia - Ecologia e sostenibilità: strategie per affrontare le sfide del terzo millennio, Caserta (Presentation)*
- 08.07.2025 **Zemmer, F.**, Rilevare specie aliene tramite pollini aerodispersi. *Confrontarsi sulle invasioni biologiche nel National Biodiversity Future Center: sfide e opportunità per stakeholder e ricercatori. Tavolo delle specie ESOTiche (TESO) del National Biodiversity Future Center (NBFC), Università degli studi di Modena e Reggio Emilia, Modena. (Invited speech)*
RICERCATORI
- 05.-07.06.2025 **Zemmer, F.**, Cristofori, A., Cristofolini, F., Gottardini, E., Airborne pollen as an indicator of global change in Alpine ecosystems
International scientific conference Alpine Flora: Biodiversity and Conservation, Cogne (Presentation)
https://www.pngp.it/sites/default/files/documenti/book_abstracts.pdf
- 21.11.2024 **Zemmer, F.**, Cristofori, A., Cristofolini, F., Gottardini, E., Studio aerobiologico in ambiente alpino. *Workshop POLLnet 2024 Il monitoraggio aerobiologico: qualità dei dati, valorizzazione e innovazione, San Michele all'Adige (TN)*, handle: <https://hdl.handle.net/10449/84217>
- 22.-23.11.2024 **Zemmer, F.**, Cristofori, A., Cristofolini, F., Gottardini, E., The air as a means to assess plant biodiversity in Alpine environments. In: *EUBIRECO 2024: Euregio Biodiversity Research Conference 2024, Bolzano, Naturmuseum Südtirol: 40-41.* url: <https://www.natura.museum/it/mostre-eventi/appuntamenti-e-visite-tematiche/convegni/eubireco24/> handle: <https://hdl.handle.net/10449/87618>
- 21.-27.07.2024 **Zemmer F.**, Cristofori A., Cristofolini F., Gottardini E., Endemic species in the aerobiome? Evidence from floristic and aerobiological studies in the Italian Alps. *XX International Botanical Congress, Madrid (Presentation)*
- 01.-05.07.2024 **Zemmer F.**, Cristofori A., Cristofolini F., Gottardini E., Plant-related Biodiversity in the Alpine Air: a Review. *World Aerobiology Congress, Vilnius*
Cristofori A., Girardi M., Micheletti D., **Zemmer F.**, Gottardini E., Airborne Environmental DNA and the Unraveling of Terrestrial Plant Biodiversity. *World Aerobiology Congress, Vilnius (Presentation)*
- 20-22.05. 2024 Cagnacci, F., Corradini, A., Ferrari, G., Gattei, A., Marinelli, D., Mehmood, F., Vettorazzo, S., Zadra, N., **Zemmer, F.**, Boscaini, A., Bruno, M.C., Cerasino, L., Cristofori, A., Donati, C., Gandolfi, A., Gianelle, D., Gottardini, E., Hauffe, H., Larsen, S., Li, M., Obertegger, U., Ossi, F., Rizzoli, A., Salmaso, N., Tagliapietra, V., Tolotti, M., Vanderlocht, C., Varotto, C., Vernesi, C., Pezzotti, M., A challenging study to address the complexity of extreme and threatened habitats: the BioAlpEC project (Biodiversity of Alpine Ecosystems in a Changing world). *Forum Nazionale della Biodiversità: convegno scientifico, Palermo* handle: <https://hdl.handle.net/10449/86995>
- 20.-22.05.2024 **Zemmer F.**, Cristofori A., Cristofolini F., Gottardini E., Detection and analysis of the primary biogenic aerosol in alpine environments. *Forum Nazionale della Biodiversità, Università degli Studi Palermo (Poster)*
- 10.-11.04.24 **Zemmer F.**, Cristofori A., Cristofolini F., Gottardini E., Assessing the biodiversity in the air: First approaches in an alpine environment. *Simposio sul Cambiamento della Biodiversità nell'Antropocene: Priorità per la Ricerca, Fano Marine Center, Fano (Poster)*

- 19.01.2024 **Zemmer F.**, Biodiversität liegt in der Luft: Die Beziehung zwischen Pollenflug und Vegetation im alpinen Bereich. *Naturmuseum Südtirol (Invited presentation)*
- 08.-09.09.2023 **Zemmer F.**, Cristofori A., Cristofolini F., Gottardini E., *Specie endemiche nell'aerobioma? Studi aerobiologici e vegetazionali-floristici in quattro siti alpini del Trentino. 3° Workshop di botanica, Fondazione Museo Civico, Rovereto (Poster)*
- 03.04.2023 **Zemmer F.**, *Potentials of aerobiology in detecting alien species*, NBFC Workshop Specie Aliene Spoke 3 Identify invasive alien species and evaluate their impact on autochthonous species, Unimore (presentation)
- 04.-05.05.2022 **Zemmer F.**, Was wissen Grundschulkinder der Unterstufe über die Honigbiene? *Multilab von Bienen bis zu Bärtierchen: Ideen für den naturwissenschaftlichen Unterricht, Free University of Bolzano (Invited presentation)*

LANGUAGES German first language, Italian (C1), English, (C1), Turkish (A2), Spanish (A1)

Memberships

- July 2024- Committee member of the European Aerobiology Society (EAS)
- 2016 - present Scientific Board of Alergoprofil <http://www.alergoprofil.pl/>
- 2013 - present European Aerobiology Society (EAS)
- 2008 - present National Federation of Italian Biologists (FONB), since 2021 member of working group environment
- 2002 - present Biologists Association of South Tyrol (VSB)