Birgit Sattler

Ao. Univ.-Prof. Dr.

Born: 7. Aug. 1969 in Schwaz, Tirol

Citizenship: Austria

Profession: Limnologist at University of Innsbruck,

Institute of Ecology, Technikerstrasse 25, 6020 Innsbruck, AUSTRIA

birgit.sattler@uibk.ac.at, www.uibk.ac.at/ecology

EDUCATION:

2011: Habilitation in Ecology

1993-1997: Ph.D. „Microorganisms in High Mountain Lakes"

1987-1992: University of Innsbruck, study of Microbiology (Limnology)

Since 2011: ½ Ao. Prof. at Institute of Ecology
Since 2013: Vice Director of Austrian Polar Research Institute
Scientific advisor at Sonnblick Verein
Scientific advisor at German Society for Polar Research
Since 2015: Director of Austrian Society of Polar Research
Since 2006: Delegate for Austria in Antarctic Treaty
Since 1994: Station Manager of Limnological High Mountain Research Station (2.400m)
Since 1994: safety officer for radiation protection

RESEARCH FOCUS:

microbial ecology in cold extreme environments (alpine and polar), biogeochemical processes and microbial communities in ice and snow of glaciers, snow packs or supercooled cloud droplets of the atmosphere

RESEARCH EXPEDITIONS :

Antarctica: Novolazarevskaya Station, Untersee: 2008
Antarctica (Mc Murdo Dry Valleys): 1996, 2000, 2009
Antarctica (Patriot Hills, South Pole): 2002
Antarctica (Port Lockroy, Antarctic Peninsula): 2007
High Arctic (Spitsbergen, Ny Ålesund): 2004-2007, 2009-2015
Greenland (Zackenberg Station): 2008

GUEST RESEARCHER & LECTURING:

1995: Alfred-Wegener-Institute of Polar Research, Bremerhaven, Germany
1999: Max-Planck-Institute for Terrestrial Microbiology, Marburg, Germany
2004: Montana State University, Bozeman, MT, USA
2010, 2012: Lecturer at UNIS (University of Svalbard): Arctic Microbiology

AWARDS:

2002: "*Antarctic Service Polar Medal* " from National Science Foundation
2003: "*Eduard Wallnöfer Research Prize"* of Tyrolean Industrial Society for „ICE AND LIFE"
2003: "*President´s Outstanding Service Award"* Planetary Studies Foundation
2005: "Nominee for *Austrian of the Year*, Category Research" Austria ´05, Die Presse
2007: „*Best Poster Award*" at conference „Managing Alpine Future" in Innsbruck, Austria
2008: "*Air & Space Award*" from Wings Worldquest (www.wingsworldquest.org)
2008: "*Sparkling Science Schulpreis"* (together with project team "BiPolar" and kids)
2009: "*IMST Award"*: "Innovationen machen Schulen top" (together with project team of Sparkling Science and kids)
2010: 3rd Prize for Poster Award in team (Birgit Standhartinger, Christoph Spötl), Polar Symposium Obergurgl, Austria
2010: "*Christian-Doppler-Award*" in team (Alexandra Tieber, Herbert Lettner, Peter Bossew)
2010: *Award of Acknowledgement of the City of Innsbruck*
2010: *Research Prize Hypo Bank Tirol*
2011: *Dr. Otto Seibert Award* for "Ice & Life"
2011: *Nominee for Environmental Award of ÖGUT* (Austrian Society for Environment and Techniques), category "Women in Environmental Techniques"
2013: "IMST Award": "Innovationen machen Schulen top" (for project: CAVE.LIFE)

SELECTED PUBLICATIONS:

Peer reviewed:

Pearce, A., Alekhina I., Terauds A., Wilmotte A., Quesada A., Edwards A., Dommergue A., Sattler B., Adams B., Magalhaes C., Loy C., Lau C., Cary C., Smith D., Wall D., Eguren G., Matcher G., Bradley J., Devera J.-P., Elster J., Hughes K., Benning L., Gunde-Cimerman N., Convey P., Hong S., Pointing S., Pellizari, Vincent W. Aerobiology over Antarctica – a new initiative for atmospheric ecology. *(Frontiers in Microbiology, in press)*

Petra Rettberg, Alexandre Anesio, Victor Baker, John Baross, Sherry Caddy, Emmanouil Detsis, Christine Foreman, Ernst Hauber, Gian Gabrielle Ori, David Pearce, Nilton Renno, Gary Ruvkun, Birgit Sattler, Mark Sauders, David Smith Dirk Wagner, Frances Westall. Planetary protection and Special Regions on Mars – a suggestion for an updated definition. *(Astrobiology, in press)*

Taraba, M., Fauland, H., Turetschek, T., Stumptner, W., Kudielka, V., Scheer, D., Sattler, B., Fritz, A., Stingl, B., Fuchs, H., Gubo, B., Hettrich, S., Hirtl, A., Unger, E., Soucek, A., Frischauf, N., Grömer, G. (2014). Passepartout Sherpa - A low-cost, reusable transportation system into the stratosphere for small experiments. Advances in Space Research 54:2259-2273.

Björkman, M.P., Zarsky, J.D., Kühnel, R., Hodson, A., Sattler, B., and Psenner, R. (2014). Microbial Cell Retention in a Melting High Arctic Snowpack, Svalbard. Arctic, Antarctic, and Alpine Research 46(2):471-482. doi: http://dx.doi.org/10.1657/1938-4246-46.2.471

Grömer, G., Sattler, B., Weisleitner, K., Hunger, L., Kohstall, C., Frisch, A., Jozevowicz, M., Meszynski, S., Storrie-Lombardi, M. and Mars 2013 team(2014). Field trial of a dual-wavelength fluorescent emission (L.I.F.E.) instrument and the Magma White Rover during the MARS2013 Mars analog mission. Astrobiology 14(5): 391-405. DOI: 10.1089/ast.2013.1081

Sattler, B. (2013), Antarctic Ecosystems. An Extreme Environment in a Changing World A.D. Rogers, N.M. Johnston, E.J. Murphy, A. Clarke (Eds) Chichester, UK; Hoboken, NJ, USA: Wiley-Blackwell, 2012. 756 pp. ISBN: 978-1-4051-9840-0. Hardback; GBP 85. Marine Ecology, 34: 503–505. doi: 10.1111/maec.12091

Zarsky J.D., M. Stibal, A. Hodson, B. Sattler, M. Schostag, L.H. Hansen, C.S. Jacobsen and R. Psenner. 2013. Large cryoconite aggregates on a Svalbard glacier support a diverse microbial community including ammonia-oxidizing archaea. Environ. Res. Lett. 8 035044. doi:10.1088/1748-9326/8/3/035044

Orgel C., Á.Kereszturi, T. Váczi, G. Groemer, B. Sattler. 2013. Scientific Results and Lessons Learned from an Integrated Crewed Mars Exploration Simulation at the Rio Tinto Mars Analogue Site, Acta Astronautica, http://dx.doi.org/10.1016/j.actaastro.2013.09.014.

Edwards A., Pachebat J.A., Swain M., Hegarty M., Hodson A.J., Irvine-Fynn T.D.L., Rassner S.M.E., & Sattler B. (2013). A metagenomic snapshot of taxonomic and functional diversity in an Alpine glacier cryoconite ecosystem Environ. Res. Letters. doi:10.1088/1748-9326/8/3/035003

Edwards A., Rassner S.M., Anesio A., Worgan H.J., Irvine-Fynn T. D.L., Williams H.W., Sattler B., Griffith G.W. (2013). Contrasts between the cryoconite and ice-marginal bacterial communities of Svalbard glaciers. Polar Research 32, 19568, http://dx.doi.org/10.3402/polar.v32i0.19468

Hell K., Edwards A.E., Zarsky J., Podmirseg S., Girdwood S., Pachebat J., Insam H., Sattler B. (2013). The dynamic bacterial communities of a melting High Arctic glacier snowpack. ISME 10.1038/ismej.2013.51.

Edwards A., Douglas B., Anesio A. M., Rassner S. M., Irvine-Fynn T. D. L., Sattler B., Griffith G.W. (2013). A distinctive fungal community inhabiting cryoconite holes on glaciers in Svalbard. Fungal Ecology 6: 168-176.

Groemer G.E., Hauth S., Luger U., Bickert K., Sattler B., Hauth E., Foeger D., Schildhammer D., Agerer C., Ragonig C., Sams S., Kaineder F., Knoflach M. (2012) The Aouda.X space suit simulator and its applications to astrobiology, Astrobiology, 12(2):125-134.

Tilg M., Storrie-Lombardi M., Kohstall C., Trenkwalder A., Psenner R., Sattler B., (2011) L.I.F.E.: laser induced fluorescence emission, a non-invasive tool to detect photosynthetic pigments in glacial ecosystems, in Instruments, Methods, and Missions for Astrobiology XIV, Richard B. Hoover; Paul C. W. Davies; Gilbert V. Levin; Alexei Y. Rozanov, Editors, Proceedings of SPIE Vol. 8152 (SPIE, Bellingham, WA 2011), 81520I.

Sattler B., Storrie-Lombardi M., Foreman C. M., Tilg M. and Psenner R. (2011). Laser-induced fluorescence emission (LIFE) from Lake Fryxell (Antarctica) cryoconites. *Annals of Glaciol. 51, (56): 145-152.*

Groemer G.E., M. Storrie-Lombardi, B. Sattler, O. Hauser, K. Bickert, E. Hauth, S. Hauth, U. Luger, D. Schildhammer, D. Foeger, J. Klauck: "Reducing biological contamination by a space suited astronaut: Laboratory and field test results from Aouda.X", Acta Astronautica (2010), doi:10.1016/j.actaastro.2010.08.018

Levitan M.A., Girin Yu.P., Kubrakova I.V., Luksha V.L., Roshchina I.A., Sattler B., Tyutyunnik O.A. and Chudetsky M.Yu. (2011). Recent sedimentation system of Lake Untersee (East Antarctica). *Geochemistry International 49(5):459-482.*

Anesio A.M., Sattler B., Foreman C.F., Telling J., Hodson A., Tranter M. and Psenner R. Carbon fluxes through bacterial communities on glacier surfaces. (2010) Annals *Glaciol., Microbiology and Biogeochemistry: 51(56):32-40*

Edwards A., Rassner S., Anesio A.M., Sattler B., Perkins W.T., Hubbard B.P., Young M. and Griffith G.W. Interactions between glacier surface hydrology and bacterial diversity of cryoconite holes in Svalbard. *ISME Journal, 1-10*.

Storrie-Lombardi M.C. & Sattler B. (2009). Laser Induced Fluorescence Emission (L.I.F.E.): In Situ Non-Destructive Detection of Microbial Life in the Ice Covers of Antarctic Lakes. *Astrobiol.* 9 (3):659-672.

Anesio A.M., Sattler B., Hodson A.J., Fritz A. and Psenner R. (2009). High microbial activities on glaciers: importance to the global cycle. *Glob. Change Biol.*, doi: 10.1111/j.1365-2486.2008.01758.x

Pearce D.A., Bridge P.D., Hughes K., Sattler B., Psenner R. and Russell N.J. (2009). Microorganisms in the atmosphere over Antarctica. *FEMS Microbial. Ecol*. 69:1-15. DOI:10.1111/j.1574-6941.2009.00706.x

Tieber A., Lettner H., Hubmer P., Sattler B. and Hofmann W. (2009). Accumulation of anthropogenic radionuclides in cryoconites on Alpine glaciers. *J. Environ. Radioactivity*. 100:590-598 doi:10.1016/j.jenvrad.2009.04.008

Storrie-Lombardi M.C., Muller J.-P., Fisk M.R., Cousins C., Sattler B., Griffiths A.D. and Coates A.J. (2009). Laser induced fluorescence emission (L.I.F.E.): Searching for Mars Organics with a UV-Enhanced PanCam. *Astrobiology* 9:953-964.

Levitan M.A., Girin Yu.P., Kubrakova I.V., Luksha V.L., Roshchina I.A., Sattler B., Tyutyunnik O.A. and Chudetsky M.Yu. (2009). Origin of Holocene sapropels of Lake Untersee (East Antarctica). Materials of XVIII International School of Marine Geology. Part I. Moscow: *GEOS*, 2009, p. 78-82. ISBN 978-5-89118-479-4

Posch T., Mindl B., Horňák K., Jezbera J., Salcher M., Sattler B., Sonntag B., Vrba J. and Šimek K. (2007). Biomass reallocation within freshwater bacterioplankton induced by manipulating phosphorus availability and grazing. *Aquat. Microb. Ecol*. 49:223-232.

Hodson A., Anesio A.M., Tranter M., Fountain A., Osborn M., Priscu J. C., Laybourn-Parry J.and Sattler B. (2007). Glacial Ecosystems. *Ecological Monographs*, 78: 41-67.

Foreman C.F., Sattler B., Mickuchi J. A., Porazinska D. L. and Priscu J.C. (2007). Metabolic activity and diversity of cryoconites in the Taylor Valley, Antarctica, *J. Geophys. Res*., 112, G04S32, doi: 10.1029/2006JG000358.

Mindl B., Anesio A.M., Meirer K., Hodson A.J., Laybourn-Parry J., Sommaruga R. and Sattler, B. (2007). Factors influencing bacterial dynamics along a transect from supraglacial runoff to proglacial lakes of a high Arctic glacier, *FEMS Microb. Ecol.* 59(2), 307-317.

Hodson A., Anesio A. M., Ng F., Watson R., Quirk J., Irvine-Fynn T., Dye A., Clark C., McCloy P., Kohler J. and Sattler B. (2007). A glacier respires: quantifying the distribution and respiration CO2 flux of cryoconite across an entire Arctic supraglacial ecosystem. 2008. *J. Geophys. Res.*, 112, G04S36, doi: 10.1029/2007JG000452.

Anesio A.M., Mindl B., Laybourn-Parry J., Hodson A.J. and Sattler B. (2007). Viral dynamics in cryoconite holes on a high Arctic glacier (Svalbard), *J. Geophys. Res., Biogeosciences*. 112, G04S31, doi: 10.1029/2006JG000350.

Mickuchi J.A, Foreman C.M., Sattler B., Lyons W.B. and Priscu J.C., (2004). Geomicrobiology of Blood Falls: An iron-rich saline discharge at terminus of the Taylor Glacier, Antarctica. *Aquat. Geochem*. 10:199-220.

Felip M., Wille A., Sattler B. and Psenner R. (2002). Microbial communities in the winter cover and the water column of an alpine lake: system connectivity and uncoupling. *Aquat. Microb. Ecol.* 29:123-134.

Battin T., Wille A., Sattler B. and Psenner R. (2001). Phylogenetic and functional heterogeneity of sediment biofilms along environmental gradients in a glacial stream. *Appl. Environ. Microbiol.* 67:799-807.

Sattler B., Puxbaum H. and Psenner R. (2001). Bacterial growth in supercooled cloud droplets. *Geophys. Res. Letters* 28(2):239-242.

Priscu J.C., Wolf C.F., Takacs C.D., Fritsen C.H., Laybourn-Parry J., Roberts E.C., Sattler B. and Lyons, B. (1999). Carbon transformations in a perennially ice-covered antarctic lake. *Bioscience* 49(12):997-1008.

Psenner R. & Sattler B. (1998). Life at the freezing point. *Science* 280:2073-2074.

Sommaruga R., Sattler B., Oberleiter A., Wille A., and Psenner R., Felip M., Camarero L., Pina S., Girones R. and Catalan J. (1999). An in-situ enclosure experiment to test the solar UVB impact on plankton in a high altitude mountain lake: II) effect on the microbial food web*. J. Plankt. Res*. 21(5):859-876.

Posch T., Simek K., Vrba J., Pernthaler J., Nedoma J., Sattler B., Sonntag B. and Psenner R. (1999). Predator-induced changes of bacterial size-structure and productivity studied on an experimental microbial community. *Aquat. Microb. Ecol*. 18:235-246.

Wille A., Sonntag B., Sattler B., and Psenner R. (1999). Abundance, biomass and size structure of the microbial assemblage in the high mountain lake Gossenköllesee (Tyrol, Austria) during the ice-free period. *J. Limnol*. 58(2):117-126.

Pernthaler J., Sattler B., Simek K., Schwarzenbacher A. and Psenner R. (1996). Top-down effects on the size-biomass distribution of a freshwater bacterioplankton community. *Aquat. Microb. Ecol*. 10:255-263.

Pernthaler J., Simek K., Sattler B., and Psenner R. (1996). Short-term changes of protozoan grazing on autotrophic picoplankton in an oligo-mesotrophic lake. *J. Plankt. Res.* 18(3):443-462.

Felip M., Sattler B., Psenner R. and Catalan J. (1995). Highly active microbial communities in the ice and snow cover of high mountain lakes. *Appl. Environ. Microbiol*. 61 (6), 2394-2401.

Alfreider A., Pernthaler J., Amann R., Sattler B., Glöckner F.-O., Wille A.and Psenner R. (1996). Community analysis of the bacterial assemblages in the winter cover and pelagic layers of a high mountain lake using *in situ* hybridization. *Appl. Environ. Microbiol*. 62 (6):2138-2144.

Wille, A., Sattler, B. and Psenner, R. (1999). Lake Ice Microbial Communities (LIMCOs) – Biology of a Periodic Ecotone. *Verh. Int. Ver. Limnol.* SIL-Dublin: 532.

Book chapters

Sattler B., Post B, Fritz A. Living Communities Thriving in Various Ice Ecosystems. In: Seckbach J., Oren A., Stan-Lotter H. (eds.) Polyextremophiles: Life Under Multiple Forms of Stress, Cellular Origin, Life in Extreme Habitats and Astrobiology, 27:381-400. DOI 10.1007/978-94-007-6488-0-16, Springer Science + Business Media Dordrecht 2013.

Sattler B, Post B. Remias D., Lütz C., Lettner H., Psenner R. (2012). Cold Alpine Regions. In: Life at Extremes, - Environments, Organisms and Strategies for Survival, Bell E. (Ed.), CABI, USA, pp. 138-154.

Psenner R. & Sattler B. (2012). Life in a Changing Climate. In: Life at Extremes, - Environments, Organisms and Strategies for Survival, Bell E. (Ed.), CABI, USA:474-478.

Schöener W., Prock S., Sattler B. (Eds.) (2010). Coole Forschung. Lernen und Forschen im Internationalen Polarjahr 2007/2008. *Innsbruck university press*, Alpine Space13.

Sattler B. & Storrie-Lombardi M.C. (2009). L.I.F.E. in Antarctic Lakes, in Polar Microbiology: The Ecology, Biodiversity and Bioremediation Potential of Microorganisms in Extremely Cold Environments, Bej A.K., Aislabie J. and Atlas R.M., Eds., Taylor and Francis: London, pp. 95-114.

Psenner R., Wille A., Priscu J.C., Felip M., Wagenbach D. and Sattler B. (2003). Low Temperature Environments and Biodiversity. In: Extremophiles: Ice Ecosystems and Biodiversity; in: Knowledge for Sustainable Development. An Insight into the Encyclopaedia of Life Support Systems Vol. III, pp 573-598, UNESCO Publishing-Eolss Publishers, Oxford, UK. Updated 2007.

Psenner R., Sattler B., Wille A., Fritsen C., Priscu J., Felip M. and Catalan J. (1999). Lake Ice Microbial Communities (LIMCOs) in Alpine and Antarctic Lakes. R. Margesin and F. Schinner, Eds., Cold Adapted Organisms – Ecology, Physiology, Enzymology and Molecular Biology. Springer-Verlag, Heidelberg, pp. 17-31.

Proceedings

Sokolov O., Meszynski S., Groemer G., Sattler B., Carbognani F., Salotti J.M., Jozefowicz M. (2014). Human-Mobile Agents Partnerships in Complex Environment. In: Proceedings of the IEEE Symposium Series in Computational Intelligence, Orlando, 9-12 December, 2014.

Tilg M., Storrie-Lombardi M., Kohstall C., Trenkwalder A., Psenner R., Sattler B. (2011). L.I.F.E.: laser induced fluorescence emission, a non-invasive tool to detect photosynthetic pigments in glacial ecosystems. In: Instruments, Methods, and Missions for Astrobiology XIV, Richard B. Hoover; Paul C. W. Davies; Gilbert V. Levin; Alexei Y. Rozanov (Eds.) Poc. SPIE 8152 (SPIE Bellingham, WA) 81520I

Storrie-Lombardi M.C. & Sattler B. (2009). Laser-Induced Fluorescence Emission (L.I.F.E.): In situ and Remote Detection of Life in Antarctic and Alaskan Ice. In: Instruments and Methods for Astrobiology and Planetary Missions XII, Richard B.

Hoover; Gilbert V. Levin; Alexei Y. Rozanov; Kurt D. Retherford (Eds.) *Proc. SPIE 7441* (SPIE, Bellingham, WA), 74410J, doi 10.1117/12831288.

Mojib N., Hunag J., Hoover R.B., Pikuta E.V., Storrie-Lombardi M., Sattler B., Andersen D. and Bej A.K. (2009). Diversity of bacterial communities in the lakes of Schirmacher Oasis, Antarctica. In: Instruments and Methods for Astrobiology and Planetary Missions XII, Richard B. Hoover; Gilbert V. Levin; Alexei Y. Rozanov; Kurt D. Retherford (Eds.) *Proc. SPIE 7441 (*SPIE, Bellingham, WA*)*, 74410J, doi: 10.1117/12.831289.

Grömer G., Frischauf N., Soucek A. and Sattler B. (2007). AustroMars – a simulated high-fidelity human Mars analogue mission, In Grömer G. (Ed.) *Proceedings of the Mars 2030 Workshop.* Austrian Space Forum Conference Pub., p. 4-12.

Sattler B., Selch F., Klammer S., Grömer G. and Sipiera P. (2007). New insights about cross-contamination procedures for analogue missions in space exploration, In Grömer G. (Ed.) *Proceedings of the Mars 2030 Workshop*. Austrian Space Forum Conference Pub., p. 13–17.

Sattler, B., Waldhuber S., Fischer H., Semmler H., Sipiera P. and Psenner R. (2004). Microbial activity and phylogeny in ice cores retrieved from Lake Paula, a newly detected freshwater lake in Antarctica. In: Instruments, Methods, and Missions for Astrobiology VIII; Richard B. Hoover, Gilbert V. Levin, Alexei Y. Rozanov (Eds.) *Proc. SPIE* 5555 (SPIE, Bellingham, WA), p. 170-179, doi 10.117/12.564554.

Sipiera P. & Sattler B. (2004). Meteorite collection and ice samples from the Pecora Escarpment, Antarctica. In: Instruments, Methods, and Missions for Astrobiology VIII; Richard B. Hoover, Gilbert V. Levin, Alexei Y. Rozanov (Eds.) *Proc. SPIE* 5555 (SPIE, Bellingham, WA), p. 107-115, doi:10.1117/12564553.

Sattler B., Puxbaum H., Limbeck A. and Psenner R. (2002). Clouds as habitat and seeders of bacteria. In: Instruments, Methods, and Missions for Astrobiology IV; Richard B. Hoover, Gilbert V. Levin, Alexei Y. Rozanov (Eds.) *Proc. SPIE 4495* (SPIE, Bellingham, WA), p. 211-222.

Sipiera P., Sattler B., Butts D.G., Butz E.H., Duffy C., Garriott R.A., Miller K., Mortvedt A., Pritzker J.N. and Tilenius E. (2002). A preliminary report on the discovery of thirty-three meteorites from the Pecora Escarpment, Antarctica. *Meteoritics & Planetary Science*, p. 5032.

Sattler B., Wille A., Waldhuber S., Sipiera P. and Psenner R. (2002). Various ice ecosystems in alpine and polar regions - an overview; In: Proceedings of the First European Workshop on Exo-Astrobiology, 16 - 19 September 2002, Graz, Austria. Ed.: Huguette Lacoste. ESA SP-518, Noordwijk, Netherlands: ESA Publications Division, ISBN 92-9092-828-X, 2002, p. 223 – 226.

Waldhuber S., Sattler B., Semmler J., Wille A. and Psenner R. (2002). Comparative 16S rDNA analysis of extremophiles in the winter cover of a high mountain lake. In: Proceedings of the First European Workshop on Exo-Astrobiology, 16 - 19 September 2002, Graz, Austria. Ed.: Huguette Lacoste. ESA SP-518, Noordwijk, Netherlands: ESA Publications Division, ISBN 92-9092-828-X 2002, p. 489-490.

German literature:

Sattler B., Larch P., Rambacher J. und Spoetl C. 2013. Das Eis der Hundsalm Eis- und Tropfsteinhöhle als Lebensraum für mikrobielle Gemeinschaften. Die Höhl 64(1-4):15-24.

Sattler B., Remias D., Lütz C., Daystch H. und Psenner R. 2010. Leben auf Schnee und Eis. In: Glaziale und periglaziale Lebensräume in im Raum Obergurgl, Koch E.M. und Erschbamer B. (Eds.), Alpine Forschungsstelle Obergurgl 1, *innsbruck university press*, Innsbruck.

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Tieber A., Lettner H., Bossew P, Hubmer A., Sattler B, und Hofmann W. (2009) Akkumulation künstlicher Radionuklide in Kryokoniten auf dem Hallstätter Gletscher, In: Landschaft und nachhaltige Entwicklung, Dachstein und Salzkammergut, Hsg. Weingartner H., Universität Salzburg, Selbstverlag der Arbeitsgruppe Landschaft und nachhaltige Entwicklung, pp. 29-40

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Sattler B., Wille A. und Psenner R. 1996. Reges Leben in der Kälte von Schnee und Eis – Active Life in the Cold of Snow and Ice. *Biologie in unserer Zeit* 26:21-25.

Popular Scientific Literature

- Der Weg in das Ewige Eis: Review in: Biologie in unserer Zeit 5: 327-328. 2002
- Meteoriten: Was von außen auf uns einstürzt. Nives Widauer, Ed., Niggli, 2005
- Das Eis lebt. AV-Jugend, 2005, 2010
- The Call of the Poles. Le Cercle Polaire, Ed., Orange Group, 2010

Public Outreach

Bridging university and schools: Ferienzug, Junge Uni, Unicom Volkshochschule, Youth into Science, **Sparkling Science**

Various talks: Rotary Club KIWANIS Club, Academic Women in Tirol, Landesbücherei, Stadtbücherei, (Fachhoch)-schulen, Kepler Salon, Linz (AT)

- *Print Media Austria:* Profil, Standard, Die Presse, Kurier, Tiroler Tageszeitung, Salzburger Nachrichten, Universum Magazin, ECHO, Wienerin, Koryphäe, Österreich, VISA Magazin, MUCHA, Österreichischer Alpenverein, Woman, ega News
- *Print Media abroad:* Die Zeit (D), GEO (D), National Geographic (D), Herald Tribune (USA), Chicago Post (USA), Washington Post (USA), DISCOVER (USA), New Scientist (USA), Wired (USA), Münchner Merkur (D), Süddeutsche Zeitung (D), Ny Techniks (S), Living Planet (Tasmanien), Sciences et Avenir (F), Lidové Noviny (CZ), Neue Zürcher Zeitung (CH), NRC Handelsblad (NL), Le Figaro (F), Sun (USA), Hannoversche Allgemeine Zeitung (D), Berliner Zeitung (D), Science & Vie Junior (F)
- *TV documentaries:* ORF (Modern Times, Newton, Tirol und Salzburg Heute, Willkommen Österreich, Stöckl am Samstag, Science Talk), NDR, BR, SAT1, ARD, ZDF, (Nano, VOX, Welt der Wunder), Korean Broadcasting Company, Servus TV („Scientia Potentia Est"), ARTE (autumn 2010), Japan NHK, BBC
- *School book :* La Vie dans les Nuages: PANORAM@TH, 1er cycle du secondaire
- *Radio interviews:* WGN Chicago, various interview in Ö1, Radio Tirol, Bayern Radio
- *Web*-reports: Frauen in W-fforte (wirtschaftsimpulse für frauen in forschung und technologie), (http://www.w-fforte.at/153.0.html?L=0)
  „Visit the views from work" w-fforte (http://www.w-fforte.at/index.php?id=164), SCIENCE-Magazine (Ice and Life)
  www.photonics.com: Finding Life in Martian Ice
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