

OBITUARIES

Michaela Bernecker, 1963-2017, a remarkable teacher, scientist and friend

Oliver Weidlich & Aymon Baud

Foreword and Michaela Bernecker's career.

Oliver Weidlich

The untimely death of Michaela Bernecker on 3rd November 2017 at her home in Al Hail, Sultanate of Oman, robbed an excellent friend and valuable colleague. She possessed enthusiasm in carbonate geology and had the remarkable ability to teach students. For her students at the German University of Technology, GUTech, she was Doctor Michaela, for her friends and colleagues she was simply 'Micha'.

Academic career at Friedrich-Alexander University Erlangen (Germany)

In 1983 Micha started to study geology at the Friedrich Alexander University, Germany. After her undergraduate degree, she got interested in microfacies analysis using thin sections and joined Eric Flügel's famous reef research group at the Paleontological Institute. Her diploma thesis was about Paleocene azooxanthellate cool-water coral mounds which are exposed in the world-class limestone quarry of Fakse, Denmark; the scientific results were presented 1989 at the 'Sediment Congress' in Innsbruck and 1990 published in *Facies*. Her passion for teaching started when she performed a paleontological student excursion to Denmark while she worked on her diploma thesis.

In 1989, immediately after submission of her diploma thesis, she got excited when Eric Flügel offered her the possibility to study Triassic carbonates from the Oman Mountains. Micha's enthusiasm for Arabic culture and carbonate sedimentology were significant drivers for her to plan the project. She visited Oman 1990 with a tourist visa having a validity of 2 weeks. In that time, she managed in Oman to convince the Ministry of Petroleum and Minerals to support the PhD project logistically by providing long-term-visa (NOC) and allowed the export of samples for further scientific analysis. In the field she worked with Oliver Weidlich, a start of a scientific life close collaboration. Occasionally, Erich Flügel came to visit her as a PhD student and they published together papers or abstracts on Oman Permian and Triassic reefs.

In her PhD thesis Micha focused on (micro)facies and paleoecology of Triassic carbonates of autochthonous and allochthonous carbonates of the Oman Mountains and her achievement was published in *Facies* on "Upper Triassic reefs of the Oman Mountains".

After her PhD in 1995, Micha decided to continue her academic career and started to work for habilitation thesis, which was at that time the final academic step on the way to a professorship in Germany. In Oman she continued her own researches, collecting samples with Oliver Weidlich, Erich Flügel, Senowbari-Daryan and Leopold Krystyn.

She broadened her research and chooses the taxonomy and paleoecology of Triassic and Tertiary scleractinians. Apart from her own sample collection, Micha visited famous collections in Copenhagen and London and got connected with world-class taxonomists. She received her habilitation document (*facultas docendi*) from Friedrich-Alexander-University

2006 and became ‘Privat-docent’ (venia legendi) in 2007. Unfortunately, her taxonomic and sedimentological work of her habilitation thesis remains unpublished

Assistant and Associate Professor Professorships

Micha became Assistant Professor in Eric Flügel’s team 1995. During the next seven years she was very much focused on student education and became a relevant member of his microfacies course, which is a renowned interdisciplinary carbonate course for students and industry colleagues outside Friedrich-Alexander-University until today. During her teaching time in Germany she organized an excursion for FAU students (Fig. 1) and offered mapping to students.



Fig. 1: Excursion with FAU students, Jebal Akhdar, 2007 (photo O. Weidlich).

In 2008 her vision to permanently work in Oman became realty when she accepted an offer as Associate Professor at the newly founded Department of Applied Geosciences at the Faculty of Sciences of the German University of Technology in Oman (GUtech) affiliated to RWTH Aachen University (Fig. 2).



Fig. 2: The GUtech campus at Athaibah, Muscat, Sultanate of Oman, open in 2007.

She had opportunity to teach in the field in the Oman Mountains (Fig. 3) and to bring GÜtech student for a field trip in Germany (Fig. 4).



Fig. 3: Micha with part of her classroom teaching Geology in the Oman Mountain (photo C. Ducassou).



Fig. 4: Micha with GÜtech students on excursion in southern Germany

Within the awarded and permanent GUTech campus built in Halban, 50 km West of the Airport, open in September 2012, Micha helped to develop the institute and became Head of the Geosciences Department in 2013. (Figs. 5, 6 and 7). The last merit of her activity was the approval of the Master Programme for Applied Geology by the Ministry of Higher Education of the Master.



Fig. 5: The GUTech new building in Halban, open Sept. 2012.



Fig. 6: Micha (on the right) with some of her GUTech colleagues at an Academic event (photo C. Ducassou).



Fig. 7: Micha, on the right, head of the GÜtech Applied Geology Department, with her close colleagues (photo Wilfried Bauer).

In February 2017, she was proud to offer an opportunity to the GÜtech high performance student (Fig. 8) of scholarships for the International Course on Carbonate Microfacies 2017 to be held at the University of Erlangen in Germany (Muscatdaily.com).



Fig. 8: Feb. 2017, one of the Micah's official last photo, with two of her high performance student (Muscatdaily.com).

Scientific activities

Despite the high workload as lecturer and academic administration duties Micha managed to publish about 90 papers and congress presentations. Out of these most relevant are papers describing Paleocene azooxanthellate cool-water coral mounds, the detailed maps of sawed

quarry walls of spectacular patch reef(s) exposed near Adnet, Austria (Fig. 8 left) and facies observations of Triassic carbonates of the Oman Mountains.

Micha loved to attend scientific congresses in Europe, the Middle East and Far East to present her results. (It can be said that) She liked GeoArabia Meetings in Bahrain (were her favorite) (Fig. 8 right). She animated students to attend meetings and helped them to win prizes.



Fig. 8 left: Micha doing fieldwork in Adnet quarry, Austria; right: Micha in front of her poster at the Geoarabia meeting in Bahrain 2008.

Other papers written with coauthors deal the taxonomy of Triassic invertebrates. Apart from the aforementioned topics Micha was interested in sedimentological aspects of alkaline lakes, as Lake Lisan.

Micha was a member of many geoscientific organizations, including AAPG, SEPM, IAS and Paläontologische Gesellschaft. Choosing very early taxonomy and paleoecology of Triassic and Tertiary scleractinians she participated in 1993 to the first European Regional Meeting of the International Society for Reef Studies in Vienna. In 1995, she became member of the Fossil Cnidaria and Porifera Association and she went and gave talk to the 7th International Fossil Cnidaria Symposium in Madrid. Each four years she actively participated to this Cnidaria International Symposium. With her 2003 experience in the organization of the 2nd International Symposium on Deep Sea Corals at FAU, Erlangen (Germany), she became very happy to be selected to organize the last one (12th) International Symposium on Fossil Cnidaria and Porifera at GÜtech, Halban, in 2015, in Oman.

Activities apart from Academia

Public outreach From the beginning Micha acknowledged the relevance of communicating scientific results to the public with exhibitions and public talks. She presented corals in exhibitions in the 1980s - early 1990s at Friedrich-Alexander-University and at Wintershall in Barnstorf. Geological Society of Oman (GSO) invited Micha as presenter for public events in the capital area.

Consultancies Apart from her mission as scientist and lecturer, Micha provided services to Wintershall Holding GmbH (German oil and Gas Company), Oolitica (carbonate consulting company and Carmeuse (important producer of pure limestone and dolostone)

Over a period of 10 years Micha's house was always open for colleagues working in Oman. These colleagues, principal collaborators and friends feel a deep sense of loss. As modest and helpful human being she will not be forgotten and has the best claim to be regarded as a remarkable teacher, scientist and friend.

From FAU to GÜtech, some of the Michaela participation on Permian-Triassic studies.

Aymon Baud

We meet first with Michaela Bernecker (Micha) during the 1993 "Carboniferous to Jurassic Pangea conference" in Calgary with both presentations and posters on Oman Permian and Triassic geology. Leading a research team on Permian and Triassic stratigraphy and sedimentology in Oman, our next meeting was in 2001, again during a Pangea Symposium. At this time it was in Muscat, as part of the International Conference on the Geology of Oman. Micha was invited to give a talk on "Second-order cycle development of the Arabian platform and Hawasina seamounts: Permian and Triassic outcrop data from central Oman".

In 2004, during the International Geological Congress in Florence she participates at two sessions: one, as our team on "Late Permian-Early Triassic events" and the other on "Paleocene/Eocene thermal maximum".

In January 2005 we meet again in Muscat during the 24th Meeting of the International Association of Sedimentology on "Scenic sedimentology" and Micha gave a talk on the Paleogene shelf of Oman.

Our next common meeting was during May 2005 at the Triassic conference on Chronostratigraphy and biotic recovery in Chaohu, China. Micha came with Oliver Weidlich, having a presentation on " Carnian to Rhaetian isolated platform and reef development in the Neo-Tethys." and she take part to the fieldtrip on the Lower Triassic of the Nanpang basin (Fig. 9 left and right).

Her starting professorship in 2008 at GÜtech, Muscat, opened some new opportunities for the organization of international geological meeting in her Permian-Triassic field of researches.

Contacted for the new International Geological Correlation Program 572 of the UNESCO on the recovery of ecosystem following the end Permian great extinction, she accepted with enthusiasm to prepare with me, a day conference followed by a fieldtrip on significant Permian-Lower Triassic outcrops in the Oman mountains, from shallow to deep water. Announcement was sent in the start of 2009, Micha and I edited the guide book and the very successful second IGCP 572 conference take place February 21, 2010 at the GÜtech meeting room (Fig. 10). Micha was Chairwomen of the morning session and she participated actively to the five days of field examination (Figs. 11, and 12).



Fig. 9, The Chaohu (China) Triassic conference, May 2005, left: Micha at Chaohu; right: at a field stop near Guando.



Fig. 10: Micha (in dark) at the starting IGCP 572 meeting in GUtech conference Hall, 21.02.2010.



Fig. 11, IGCP 572 Fieldtrip, Feb. 2010, left: Micha taking note in the field; right: departure of the fieldtrip, Micha in the sun.



Fig.12: Seating on the Sumeini lower Triassic platy limestone, friend discussion with Micha.

In 2011, Micha was asked to be member of the scientific committee of the International Conference on the Geology of the Arabian Plate and the Oman Mountains scheduled to open January 7, 2012 at Sultan Qaboos University. With Oliver Weidlich, she gave a talk on " The

Oman Exotics: evidence for the development of isolated carbonate platforms in the Tethyan Ocean" and a poster on "Postdepositional deformation of carbonates and injection of fluidized mud: Field observations from the Saiq Formation, Eastern Oman Mountains". After the congress, she was in charge of the post-congress fieldtrip at Barr Al Hikman, on "Modern Carbonates & Sabkhas".

Preparing with three colleagues during 2014 the 12th International Symposium on Fossil Cnidaria and Porifera, she sent invitation to all interested scientists. Micha asked Oliver Weidlich and me to organize a pre-conference fieldtrip on the "Permian limestones with sponges and corals in the Ba'id area". Giving her the guidebook on time for printing in GUtech, I luckily leded this one day trip, valued by participants. With more than fifty members, the meeting was very successful as the two days field trip that she organized on "Permian/Triassic reefal limestones in the Hajar Mountains" and you make me happy when asking me to prepare a stop on the Permian-Triassic boundary outcrop on the Saiq Plateau.

Outside the above mentioned official meetings, from 2009 up to last year, I take visit to GUtech each year, starting or ending Oman field researches and Micha always warmly welcome me, my friends and my colleagues and, when asked, she helped us to find field equipment or to store it, as to store geological samples.

Micha, you were an open, noble and esteemed colleague. We will not forget you.

Acknowledgments

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Oliver Weidlich and Aymon Baud

Michaela Bernecker publication list

A- Articles, journals & books

1) Michaela Bernecker alone or first in collaboration:

Bernecker, M. (1996): Upper Triassic reefs of the Oman Mountains: Data from the South Tethyan margin.- *Facies* **34**, 41-76, Erlangen.

Bernecker, M. (2005): Late Triassic reefs from the Northwest and South Tethys: distribution, setting and biotic composition.- *Facies* **51**, 442-453.

Bernecker, M. (2007): Facies architecture of an isolated carbonate platform in the Hawasina Basin: The Late Triassic Jabal Kawr of Oman.- *Palaeogeography, Palaeoclimatology, Palaeoecology*. **252**, 270-280.

Bernecker, M. (2014): Paleogene Carbonates of Oman: Lithofacies and Stratigraphy. In: Rocha, R., Pais, J., Kullberg, J.C., Finney, S. (Eds.): *STRATI 2013 At the Cutting Edge of Stratigraphy*. Series Geology 71-74, Springer, Heidelberg.

Bernecker, M. & Weidlich, O. (1990): The Danian (Paleocene) coral limestone of Fakse, Denmark: A model for ancient aphotic, azooxanthellate coral mounds. - *Facies*, **22**,103-138, Erlangen.

Bernecker, M. & Weidlich, O. (1994): Attempted reconstruction of Permian and Triassic skeletonization from reefbuilders (Oman, Turkey): Quantitative assessment with digital image analysis. - *Jahrbuch der Geologischen Bundesanstalt Wien*, **50**, 31 - 56, Vienna.

Bernecker, M., Weidlich, O. & Flügel, E. (1999): Response of Triassic Reef Coral Communities to Sea-level fluctuations, Storms and Sedimentation: Evidence from a Spectacular Outcrop (Adnet, Austria).- *Facies* **40**, 229-280, Erlangen.

Bernecker, M. & Weidlich, O. (2005): Azooxanthellate corals in a boreal shelf environment: Development in the Late Maastrichtian – Early Paleocene of the Danish Basin. – In: Freiwald, A. & Roberts, M. (Eds.), *ISDSC Special Volume*, 3-25, Springer Verlag, Berlin, Heidelberg.

Bernecker, M. & Weidlich, O. (2006): Paleocene bryozoan and coral mounds of Fakse, Denmark: Habitat preferences of isidid octocorals.- *Courier Forschungsinstitut Senckenberg* **257**, 7-20.

2) Michaela Bernecker in collaboration:

Al Habsi, N., Al Shukaili, M., Al Tooqi, S., Ehrenberg, S.N. and **Bernecker, M.** (2014): Lithofacies, diagenesis and reservoir quality of Upper Shu'aiba reservoirs in northwestern Oman. *Geoarabia* **19/4**, 145-182, Gulf PetroLink, Bahrain.

Baud, A., **Bernecker, M.**, Krystyn, L., Richoz, S. Weidlich, O. (2012): The Arabian Plate and the IGCP Programme 572: Permian Triassic extinction and recovery: Results from the Muscat –GUtech German University of Technology in Oman field meeting. *Arabian Plate Geology Workshop*, Kuwait. *Geoarabia* **17/1**,199-203, Bahrain.

Baud, A. & **Bernecker, M.** (2012): Report on the second IGCP 572 field workshop, Feb 20-26, 2010 in the Sultanate of Oman. *Albertiana* **40**, 21-27, Utrecht.

Flügel, E. & **Bernecker, M.** (1996): Upper Triassic Reefs of the South Tethyan Margin (Oman).- In: Reitner, J., Neuweiler, F. & Gunkel, F. (eds.): *Global and Regional Controls on biogenic Sedimentation. I. Reef Evolution.*- *Special Volume* **2**, 273-277, Göttingen.

Mattern, F., & **Bernecker, M.** (2018). A shallow marine clinoform system in limestones (Paleocene/Eocene Jafnayn Formation, Oman): geometry, microfacies, environment and processes. *Carbonates and Evaporites*, 1-13.

Senowbari-Daryan, B. & **Bernecker, M.** (2000): Crustacean microcoprolites from the Upper Triassic, Oman.- *Boll. Soc. Paleont. Ital.* **39/1**, 13-20, Modena.

Senowbari-Daryan, B. & **Bernecker, M.** (2005): Crustacean coprolites of the Late Triassic Tethys: Biogeography from the Mediterranean to the Middle East.- *Journal of Alpine Geology* 47, 137-144

Senowbari-Daryan, B., **Bernecker, M.** (2009): Carnian (Upper Triassic) reef biota from limestone blocks of different tectonic settings in Oman. - *Beringeria* 40 (3-53)

Senowbari-Daryan, B., **Bernecker, M.** (2009): *Amplysiphonella adnetensis* nov. sp. (Sphinctozoa, Porifera) from the Upper Triassic reef complex near Adnet (Salzburg, Austria). *Journal of Alpine Geology* 51 (73-78).

Senowbari-Daryan, B., **Bernecker, M.**, Krystyn, L. & Siblik, M. (1999): Carnian reef biota from a megabreccia of the Hawasina Complex (Al Aqil), Oman.- *Riv. It. Paleont. Strat.* **105**/3, 327-342, Milano.

Weidlich, O., & **Bernecker, M.** (2002): Permo-Triassic second- and third-order sequence stratigraphy of the Arabian platform and Neo-Tethys: Controversy to the global signal?- *Georabia* **7/2**, 315, Bahrain.

Weidlich, O., & **Bernecker, M.** (2003): Supersequence and composite sequence carbonate platform growth: Permian and Triassic outcrop data of the Arabian Platform and Neotethys.- *Sedimentary Geology* 158, 87 – 116.

Weidlich, O., & **Bernecker, M.** (2004): Quantification of depositional changes and paleo-seismic activities from laminated sediments using outcrop data.- *Sedimentary Geology* 166, 11-20.

Weidlich, O. & **Bernecker, M.** (2007): Differential severity of Permian-Triassic environmental changes on Tethyan shallow water carbonate platforms.- *Global and Planetary Change* 55, 209-235.

Weidlich, O. & **Bernecker, M.** (2011): Biotic carbonate precipitation inhibited during the Early Triassic at the rim of the Arabian Platform. *Palaeogeography, Palaeoclimatology, Palaeoecology* 308, 129-150, Elsevier.

Weidlich, O., **Bernecker, M.** & Flügel, E. (1993): Combined quantitative analysis and microfacies studies of ancient reefs: an integrated approach to Upper Permian and Upper Triassic reef carbonates (Sultanate of Oman). - *Facies*, 28, 115 - 144, Erlangen.

B- Guide books.

Baud, A. & **Bernecker, M.** (2010) (eds): The Permian-Triassic transition in the Oman Mountains: Transect of the Tethyan margin from shallow to deep-water deposits. IGCP 572 Field Guide Book 2, GUtech Geoscience Workshop Publication, 1, 109 p., 95 figs. GUtech, Muscat.

Bernecker, M. & Weidlich, O. (2015): Platform and reefal limestones of the Permian Saiq and the Triassic Misfah Formation in the central Hajar Mountains. 12 ISFCP Pre-conference FT 2 Guide-book. Muscat.

Mattern, F., Scharf, A., **Bernecker, M.**, Moreatis, D., Pracejus, B. (2015): Geological Fieldtrip to Al Khoud Area, 12 ISFCP Conference Field Guide-book FT 3. Muscat.

Weidlich, O. & **Bernecker, M. (2010):** The Permian-Triassic transition in Wadi Aday, Saih Hatat, Oman Mountains, in: Baud, A. & Bernecker, M. (eds): Transect of the Tethyan margin from shallow to deep-water deposits, IGCP 572 Field Guide Book 2, GUTech Geoscience Workshop Pub. 1, 18-33, figs. 7-18, Muscat.

C- Conference Abstracts.

Al-Sinawi, N. & **Bernecker, M. (2015) -** Sedimentological study on Oligocene-Middle Miocene Coral Limestones in the Duqm area, Oman. 12th International Symposium on Fossil Cnidaria and Porifera 2015 at GUTech, Halban.

Bauer, W., **Bernecker, M.**, Heim, B., Holzbecher, E., Visser, W. (2016). Designing and Implementing Applied Geosciences Bachelor and Master Programs Tailored for the Gulf Region, in Proceedings of GEO 2016, Bahrain, 7-10 March 2016.

Bernecker, M. (1995): Upper Triassic coral communities from the Oman Mountains: occurrence and distribution pattern. – 7th International Fossil Cnidaria Symposium, Madrid.

Bernecker, M. (1996): Upper Triassic coral communities from the Oman Mountains: occurrence and distribution pattern. - North American Paleontological Convention (NAPC-96 Washington), The Paleontological Society, Special publication 8; Abstracts, 31.

Bernecker, M. (1999): Coral development and distribution from Paleocene to Miocene: Examples from the Arabian shelf.- 8th International Symposium on Fossil Cnidaria and Porifera.- Sendai, Japan.

Bernecker, M. (2001): Tertiary coral faunas of Oman: Case studies for paleobiogeographic comparisons.- International Conference Paleobiogeography & Paleoecology, Piacenza & Castell Arquato, Italy.

Bernecker, M. (2001): Coral distribution on the Arabian shelf: Examples from the Tertiary of Oman.- International Conference Geology of Oman, Muscat.

Bernecker, M. (2001): Second-order cycle development of the Arabian platform and Hawasina seamounts: Permian and Triassic outcrop data from central Oman. International Conference Geology of Oman, Pangea Symposium, Muscat.

Bernecker, M. (2003): Development of the Arabian shelf during the Paleogene: Influence on scleractinian corals in response to environmental perturbations.- International Symposium on the Paleogene: Preparing for Modern Life and Climate, Leuven, Belgium.

Bernecker, M. (2003): Scleractinian distribution in a siliciclastic influenced carbonate setting: Examples from the Paleocene/Eocene of Oman.- 9th International Symposium on Fossil Cnidaria and Porifera, Graz, Austria.

Bernecker, M. (2004): Are the biotic changes of the southern Tethys influenced by the Paleocene/Eocene thermal maximum (PETM)?- 32th International Geological Congress, Florence, Italy.

Bernecker, M. (2005): Biotic response to sea-level fluctuations and climate change: a case study from the Paleogene shelf of Oman.- IAS Meeting of Sedimentology, Muscat, Oman.

Bernecker, M. (2005): Carnian to Rhaetian isolated platform and reef development in the Neo-Tethys.- International Meeting on Triassic Chronostratigraphy and Biotic Recovery, Chaohu, China.

Bernecker, M. (2006): Facies heterogeneity on the SE Arabian platform: Outcrop analogues to record environmental perturbations during the Paleogene.- AAPG Conference: Architecture of Carbonate Systems Through Time, Mallorca, Spain (invited as key note oral presentation).

Bernecker, M. (2006): Isolated platform and reef growth in the Hawasina Ocean: The Late Triassic Jabal Kaur of Oman.- GEO 2006, 7th Middle East Petroleum Geoscience Conference, Bahrain.

Bernecker, M. (2008): Monitoring variations in carbonate biofacies: Studies from Tertiary outcrops of Oman.- GEO 2008, 8th Middle East Petroleum Geoscience Conference, Bahrain.

Bernecker, M. (2009): Maastrichtian-Danian azooxanthellate corals of Nugsuaq, West Greenland from the Denmark Geological Museum collection. Erlanger Geol. Abh. Palaeontological Society Special Volume 6 (76-77)

Bernecker, M., (2011): Distribution of Paleogene Corals on the Arabian Shelf. 11th International Symposium on Fossil Cnidaria and Porifera 22-26 August 2011 Liège, Belgium

Bernecker, M. (2013): Paleogene Carbonates of Oman: Lithofacies and Stratigraphy. International Congress on Stratigraphy, Lisbon, Portugal.

Bernecker, M. (2015) (Editor): 12th International Symposium on Fossil Cnidaria and Porifera 2015 GÜtech, Abstract Volume, GÜtech Geoscience Conference Publication

Bernecker, M., Al Batrani, S., Al Yaarubi, R., and Ehrenberg, S. (2014) Shallow cores of Ras Al Hamra, Oman: facies & diagenesis. Poster presentation for GEO2014, Bahrain.

Bernecker, M., Al Jabri, A., Al Shaqsi, S. (2016). The Ras Al Hamra Limestone: An Outcrop Analogue to the Shallow Cores of Umm Er Radhuma?, in Proceedings of 6th Arabian Plate Geology Workshop, Abu Dhabi, 5th - 7th December 2016. : EAGE.

Bernecker, M. and A. Car (2011). Geoinformation for the Public: A Journey to the Earth History of Oman., Presentation at the conference Geotourism 2011, Muscat, Oman

Bernecker, M., Darrell, J. & Rosen, B. (2007): Taxonomy and palaeobiogeography of Palaeogene Corals From the Natural History Museum Collections.- 10th International Symposium on Fossil Cnidaria and Porifera, St. Petersburg, Russia.

Bernecker, M. and Mattern, F. (2014): Sedimentation on the Eocene Arabian Carbonate Platform: Outcrop studies from Central Oman, 19th International Sedimentological Congress, Geneva

Bernecker, M., Thauer, K. & Al-Sayigh, A.R. (2008): Shallow marine, benthic organisms reflecting environmental changes: Examples from the Paleocene and Eocene of central Oman.- 5th International Congress of Environmental Micropaleontology, Microbiology and Meiobenthology, EMMM 2008, Madras, India.

Bernecker, M. & Weidlich, O. (1993): Quantitative Assessment of skeletonization from Upper Permian and Upper Triassic reef builders (Sultanate of Oman, Turkey). - Abstract Volume of the First European Regional Meeting of the International Society for Reef Studies, Vienna.

Bernecker, M. & Weidlich, O. (2002): Permian-Triassic carbonates of the southwestern Tethys: Influence of climate change, rifting and sea-level changes.- GEO 2002, Würzburg, Germany.

Bernecker, M. & Weidlich, O. (2003): Azooxanthellate corals in a boreal shelf environment: Development in the Late Maastrichtian - Early Paleocene of the Danish Basin.- 2nd International Symposium on Deep Sea Corals, Erlangen, Germany.

Bernecker, M. & Weidlich, O. (2012): The Oman Exotics: Evidence for the development of isolated carbonate platforms in the Tethyan Ocean. International Conference on the Geology of the Arabian Plate and the Oman Mountains, Geoarabia, 17/3, 200-202, Bahrain.

Koehrer, B. & **Bernecker, M.** (2012). Oman Mountains field trip reveals Khuff reservoir architecture. *EAGE Newsletter Middle East*, no. 1, 2012, p. 4.

Mattern, F., **Bernecker, M.** (2016). Sedimentology of a progradational limestone unit with topset-foreset transitions in an intraplatform setting from the Paleogene of Oman, in Proceedings of 2nd International Conference on Geology, Dubai, UAE, 21-22 April 2016

Samankassou, E., **Bernecker, M.** and Flügel, E. (2001): The Late Triassic Kavr Platform, Sultanate of Oman: An analogue to the Dachstein Platform, Northern Calcareous Alps, Austria? International Conference Geology of Oman, Pangea Symposium, Muscat, 77-78

Weidlich, O., Baud, A., **Bernecker, M.**, Krystyn, L. & Richoz, S. (2010): The Permian-Triassic Boundary in the Middle East: a review. IGCP 572 Field Meeting, GUTech Geoscience Workshop, Abstract book, 3.

Weidlich, O., **Bernecker, M.** & Flügel, E. (1993): Framework reconstruction of Upper Permian and Triassic reefal carbonates at the southern Tethyan margin (Sultanate of Oman): A cornerstone for comparison. - Abstract Volume of the Annual Convention of the Canadian Society of Petroleum Geologists with GSGP, "Carboniferous to Jurassic Pangea 1993", p. 331, Calgary, Canada.

Weidlich, O., **Bernecker, M.** & Flügel, E. (1993): Upper Permian and Upper Triassic reefs (Sultanate of Oman): Are there common principles in spite of global change? - p. 42, Abstract Volume of the SEPM Meeting "Stratigraphic record of global change, State College, USA.

Weidlich, O. & **Bernecker, M.** & Flügel, E. (2000): Hartgründe und Lösungshohlräume im obertriadischen Adnet-Riff (Österreich): Hinweise auf die Amplitude relativer Meeresspiegelschwankungen. – Sediment 2000 Kurzfassungen, Mitt. Ges. Geol. Bergbaustud. Österr., v. 43, p. 146-147, Leoben.

Weidlich, O. & **Bernecker, M.** (1998): The Hawasina Nappes of the Oman Mountains: economic and scientific significance for geologists. - 2. Meeting of the German-Omani Association, Bonn, Germany.

Weidlich, O. & **Bernecker, M.** (2001): Arabian platform and and Hawasina seamount evolution: Data from the Permian and Triassic of the Oman Mountains.- International Conference Geology of Oman, Muscat.

Weidlich, O. & **Bernecker, M.**, Cremer, H., Holger, H.-G., Schandelmeier, H., Shinaq, R. (2002): High-resolution Pleistocene climatic and seismic records (?70,000-12,000 PB) from the Dead Sea Basin (Jordan).- EPA (European Palaeontological Association) workshop Fribourg, Switzerland.

Weidlich, O. & **Bernecker, M.**, Grootes, P., Kaulich, B., Shinaq, R. (2003): Was the Middle East exclusively arid during the Late Holocene? Lessons from a Dead Sea-Stromatolite under consideration of multiproxy data (Jordan).- Geological Society of America (GSA) Annual Meeting, Seattle.

Weidlich, O. & **Bernecker, M.** (2004): Response of Tethyan Permian-Triassic carbonate platforms from Oman to superanoxia and mass extinction.- 32th International Geological Congress, Florence, Italy.

Weidlich, O. & **Bernecker, M.** (2004): Permian-Triassic long-term superanoxia, biogenic carbonate productivity collapse and no consequences for the reservoirs of the Arabian Peninsula?- GEO 2004, 6th Middle East Petroleum Geoscience Conference, Bahrain.

Weidlich, O. & **Bernecker, M.** (2005a): Differential demise and recovery of carbonate platforms: long-term consequences of the Permian-Triassic boundary event in Oman.- IAS Meeting of Sedimentology, Muscat, Oman.

Weidlich, O. & **Bernecker, M.** (2005b): Evolution of the Arabian Plate across the Permian-Triassic boundary: New insights for the porosity development of carbonate reservoirs.- PESGB Middle East to Far East Carbonate Reservoirs: Exploration, Development and Exploitation, London, UK.

Weidlich, O. & **Bernecker, M.** (2012): Earthquake-triggered post-depositional Deformation at the rim of the Arabian platform (Permian-Triassic), Oman Mountains. Arabian Plate Geology Workshop, Kuwait. *Geoarabia* **17/2**, 253-256, Bahrain.

Weidlich, O. & **Bernecker, M.** (2012): Postdepositional deformation of carbonates and injection of fluidized mud: Field observations from the Saiq Formation, Eastern Oman Mountains. International Conference on the Geology of the Arabian Plate and the Oman Mountains. *Geoarabia* **17/2**, 258-261, Bahrain.