

## Publication list of Gunther Seckmeyer

update on 29 April 2011

### Overview

|                                     | page |
|-------------------------------------|------|
| Peer reviewed publications          | 2    |
| Further publications                | 7    |
| Academic degrees                    | 11   |
| Funded research projects, reports   | 11   |
| Posters                             | 13   |
| Supervisions                        | 14   |
| Scientific presentations, courses   | 17   |
| Peer reviews                        | 26   |
| Organisation of scientific meetings | 27   |
| Committees, awards                  | 29   |

## Peer reviewed publications

- (1) Beringer S., Schilke H., Lohse I., Seckmeyer G.: Case study showing that the tilt angle of photovoltaic plants is nearly irrelevant, *Solar energy*, 2011, in press
- (2) Seckmeyer G., Bais A., Bernhard G., Blumthaler M., Lantz K., McKenzie R.L., Kiedron P., Drüke S., Riechelmann S.: Instruments to measure solar ultraviolet radiation, part 4: Array Spectroradiometers, 43 pages, WMO-GAW report 191, TD 5038, 2010
- (3) Seckmeyer G., Bais A., Bernhard G., Blumthaler M., Lantz K., McKenzie R.L., Johnsen B.: Instruments to measure solar ultraviolet radiation, part 3: Multi-channel filter instruments, 55 pages, WMO-GAW report 190, TD 5037, 2010
- (4) Meinander O., Wuttke S., Seckmeyer G., Kazadzis S., Lindfors S., and Kyrö E. Solar zenith angle asymmetry cases in polar snow UV albedo. *Geophysica* 45 (1-2): 183-198, 2009
- (5) Pissulla, D. , Seckmeyer G., Cordero R. R., Blumthaler M., Schallhart B., Webb A., Kift R., Smedley A., Bais A. F., Kouremeti N., Cede A., Herman J., Kowalewski M.: Comparison of different calibration methods to derive spectral radiance as a function of incident and azimuth angle, *Photochem. Photobiol. Sci.*, 2009, 8, 516 - 527, DOI: 10.1039/b817018e, 2009
- (6) Cordero R.R., Seckmeyer G., Pissulla D., Labbe F.: Exploitation of Spectral Direct UV Irradiance Measurements” *Metrologia* 46, pp 19-25, 2009
- (7) Lantz K., Disterhopt P., Slusser J., Gao W., Berndt J., Bernhard G., Bloms S., Booth R., Ebrahimian J., Harrison L., Janson G., Johnston P., Kiedron P., McKenzie R., Kimlin M., Neale P., O’Neill M., Quang V. V. Seckmeyer G., Taylor T., Wuttke S., Michalsky J.: The 2003 North American interagency intercomparison of ultraviolet spectroradiometers: Scanning and spectrograph instruments, *J. Appl. Remote Sens.* 2, 023547, 2008
- (8) Cordero R.R. Seckmeyer G. Labbe F.: Cosine error influence on ground-based spectral UV irradiance measurements, *Metrologia* 45, pp 406-414, 2008
- (9) Seckmeyer G., Glandorf M., Wichers C., McKenzie R.L., Henriques D., Carvalho F., Webb A., Siani A.-M., Bais A., Kjeldstad B., Brogniez C., Werle P., Koskela T., Lakkala K., Gröbner J., Slaper H., denOuter P, Feister U.: Europe’s darker atmosphere in the UV-B, *Photochem. and Photobiol. Sci.*, 2008, 7, 925 – 930, August, 2008
- (10) Cordero R.R. , Seckmeyer G., Pissulla D., DaSilva L, Labbe F.: Uncertainty evaluation of spectral UV irradiance measurements, *Measurement Science & Technology*, **19**, 045104, 1-15, 2008
- (11) Cordero R.R., Seckmeyer G., Pissulla D., Labbe F.: Uncertainty of experimental integrals: application to the UV index calculation, *Metrologia* 45, 1-10, 2008
- (12) Seckmeyer G., Pissulla D., Glandorf M, Henriques D., Johnsen B., Webb A.R., Siani A-M, Bais A., Kjeldstad B., Brogniez C., Lenoble J., Gardiner B., Kirsch P., Koskela T., Kaurola J., Uhlmann B., Slaper H., Outer P., Janouch M., Werle P., Groebner J., Mayer B., Casiniere

A., Simic S., Carvalho F.: Variability of UV irradiance in Europe, *Photochemistry&Photobiology*, 84: 172–179, 2008

- (13) Cordero R.R., Seckmeyer G., Labbe F.: Evaluating the uncertainties of data rendered by computational models, *Metrologia*, 44, L23-L30, 2007
- (14) Cordero R.R. , Seckmeyer G., Pissulla D., DaSilva L.: Uncertainty evaluation of the spectral UV irradiance evaluated by using the UVSPEC Radiative Transfer Model, *Optic Communications*, doi:10.1016/j.optcom.2007.04.008, 2007
- (15) Bais A.F., Lubin D. (lead authors), Arola A., Bernhard G., Blumthaler M., Chubarova N., Erlick C., Gies H.P., Krotkov N., Lantz K., Mayer B., McKenzie R.L., Piacentini R.D., Seckmeyer G., Slusser J.R., Zerefos C.S.: Surface Ultraviolet Radiation: Past, Present, and Future, Chapter 7, 2006 WMO/UNEP ozone assessment, WMO, 2007
- (16) Cordero R.R., Seckmeyer G., Labbe F.: Effect of the resolution on the ‘type A’ uncertainty analysis, *Metrologia*, 43, L33-L38, 2006
- (17) Wuttke S., Seckmeyer G.: Spectral Radiance and Sky Luminance in Antarctica: A Case Study, *Theoretical and Applied Climatology*, 85, pp131-148, DOI: 10.1007/s00704-005-0188-2, 2006
- (18) Groebner J., Blumthaler M., Kazadzis S., Bais A., Webb A., Schreder J., Seckmeyer G., Rembges D.: Quality Assurance of spectral solar UV measurements: Results from 26 UV monitoring sites in Europe, 2002 to 2004, *Metrologia* 43, pp 66-71, 2006
- (19) Wuttke S., Seckmeyer G., Koenig-Langlo G.: Measurements of spectral snow albedo at Neumayer, Antarctica, *Annales Geophysicae*, 24, 7-21. SREF: 1432-0576/ag/2006-24-7, 2006
- (20) Wuttke S., Bernhard G., Ehranjian J., McKenzie R., Johnston P., O’Neil M., Seckmeyer G.: New spectroradiometers complying with NDSC standards, *Journal of atmospheric and oceanic technology*, 23(2), 241-251. DOI: 10.1175/JTECH1826.1, February, 2006
- (21) Groebner J., Schreder J., Kazadzis S., Bais A.F., Blumthaler M., Goerts P., Koskela T., Tax R., Seckmeyer G., Webb A.R.: A travelling reference spectroradiometer for routine QA of spectral solar UV irradiance measurements, *Applied Optics*, 44(25), pp 5321-5331, September 2005
- (22) Bais A., Kazadzis S., Garane K., Kouremeti N., Gröbner J., Blumthaler M., Seckmeyer G., Webb A., Koskela T., Görts P., Schreder J.: Portable device for characterizing the angular response of UV spectroradiometers, *Applied Optics*, 44(33), pp 7136-7143, November 2005
- (23) Glandorf M., Arola A., Bais A., Seckmeyer G.: Possibilities to detect trends in spectral UV irradiance, *Theor. Appl. Climatol.*, DOI 10.1007/s00704-004-0109-9, 2004
- (24) Kerr J.B., Seckmeyer G. (lead authors), Bais A.F., Bernhard G., Blumthaler M., Diaz S.B., Krotkov N., Lubin D., McKenzie R.L., Sabziparvar A.A., Verdebout J.: Surface Ultraviolet Radiation: Past and Future, chapter 5 of WMO/UNEP 2002 assessment on ozone depletion, WMO, 2003

- (25) Wuttke S., Verdebout J., Seckmeyer G.: An improved algorithm for satellite-derived UV radiation, *Photochem.&Photobiol.*, 77(1), pp 52-57, 2003
- (26) Schwander H., Koepke P., Kaifel A., Seckmeyer G.: Modification of spectral UV irradiance by clouds, *Journal of Geophysical Research*, 107, D16, pp. AAC 7-1 to AAC7-12, 2002
- (27) Arola A., Kalliskota S., den Outer P.N., Edvardsen K., Hansen G., Koskela T., Martin T.J., Matthijsen J., Meerkoetter R., Peeters P., Seckmeyer G., Simon P., Slaper H., Taalas P., Verdebout J.: Assessment of four methods to estimate UV radiation using satellite data, by comparison with ground measurements from four stations in Europe, *Journal of Geophysical Research*, 107, 10.1029/2001JD000462, 2002
- (28) Lenoble J., Albold A., Blumthaler M., Cabot T., de la Casinière A., Gröbner J., Martin T., Masserot D., Müller M., Philipona R., Pichler T., Seckmeyer G., Schmucki G., Touré M., Yon A.: An attempt to retrieve the ultraviolet aerosol optical depth during a spring campaign in the Bavarian Alps, *Applied Optics*, Vol.41, No.9, pp.1629-1639, 20 March, 2002
- (29) McKenzie R.L., Seckmeyer G., Bais A.F., Kerr J.B., Madronich S.: Satellite-retrievals of erythemal UV dose compared with ground-based measurements at Northern and Southern mid-latitude, *Journal of Geophysical Research*, Vol. 106, NO.D20, pp 24,051-24,062, October 2001
- (30) Weihs P., Lenoble J., Blumthaler M., Martin T., Seckmeyer G., Philipona R., De la Casiniere, Sergent C., Gröbner J., Cabot T., Masserot D., Pichler T., Pougatch E., Rengarajan G., Schmucki D., Simic S: Modeling the effect on an Inhomogeneous Surface Albedo on incident UV Radiation in Mountainous Terrain: Determination of an Effective Surface Albedo, *Geophysical Research Letters*, Vol. 28, No.16, pp 3111-3114, 2001
- (31) Bais, A. F., Gardiner B.G., Slaper H., Blumthaler M., Bernhard G., McKenzie R., Webb A.R., Seckmeyer G., Kjeldstad B., Koskela T., Kirsch P., Gröbner J., Kerr J.B., Kazadzis S., Leszczynski K., Wardle D., Brogniez C., Josefsson W., Gillotay D., Reinen H., Weihs P., Svenoe T., Eriksen P., Kuik F., Redondas A., "The SUSPEN intercomparison of ultraviolet spectroradiometers", *Journal of Geophysical Research*, 106, D12, 12,509-12,526, 2001
- (32) Martin T.J., Gardiner B.G., Seckmeyer G.: Uncertainties in satellite-derived estimates of surface UV doses, *Journal of Geophysical Research*, 105, No. D22, 27005, 2000
- (33) Groebner J., Albold A., Blumthaler M., Cabot T., De la Casiniere A., Lenoble J., Martin T., Masserot D., Mueller M., Phillipona R., Pichler T., Rengarajan G., Schmucki D., Seckmeyer G., Sergent C., Weihs P.: The Variability of spectral solar ultraviolet Irradiance in an Alpine Environment, *Journal of Geophysical Research*, 105 (D22), pp 26991-27003, 2000
- (34) Noelle A., Pfister G., Seckmeyer G., Wilhelms H., Richards M.L., Hartmann G.K.: DUST: An Interactive Data Visualization Tool for Selected Atmospheric Data, *Phys. Chem. Earth (A)*, 25, 8, pp. 635-638, 2000
- (35) van Weele M., Martin T.J., Blumthaler M., Brogniez C., den Outer P.N., Engelsen O., Lenoble J., Mayer B., Pfister G., Ruggaber A., Walravens B., Weihs P., Gardiner B.G., Gillotay D., Haferl D., Kylling A., Seckmeyer G., Wauben W.M.F.: From model

intercomparison towards benchmark UV spectra for six real atmospheric cases, *Journal of Geophysical Research*, 105, D4, pp 4915-4925, 2000

- (36) Schwander H., Mayer B., Ruggaber A., Albold A., Seckmeyer G., Koepke P.: Method to determine snow albedo values in the UV for radiative transfer modelling, *Appl. Optics*, Vol. 38, No. 18, pp 3869-3875, 1999
- (37) Bernhard G., Seckmeyer G.: Uncertainty of measurements of spectral solar UV irradiance, *Journal of Geophysical Research, Atmospheres*, Vol 104, D12, pp 14321-14345, 1999
- (38) Herman J., McKenzie R.L., Diaz S.B., Kerr J.B., Seckmeyer G.: Surface Ultraviolet Radiation, in *Scientific Assessment of Ozone Depletion 1998: Chapter 9*, World Meteorological Organization, Global Ozone Research and Monitoring Project - Report No. 37, UNEP, P.O. Box 30552, Nairobi, Kenya, 1999
- (39) Mayer B., Kylling A., Madronich S., Seckmeyer G.: Enhanced Absorption of UV Irradiance due to Multiple Scattering in Clouds: Experimental Evidence and Theoretical Explanation, *Journal of Geophysical Research*, 1998, Vol 103, No D23, pp 31241-31254, December 20, 1998
- (40) Bernhard G., Seckmeyer G., McKenzie R.L., Johnston P.V.: Ratio Spectra as a Quality Control Tool for Solar Spectral UV Measurements, *Journal of Geophysical Research*, 103, D22, pp 28,855-28,861, 1998
- (41) Koepke P., Bais A., Balis D., Buchwitz M., DeBacker H., de Cabo X., Eckert P., Eriksen P., Gillotay D., Heikkilae A., Koskela T., Lapeta B., Litynska Z., Lorente J., Mayer B., Renaud A., Ruggaber A., Schauburger G., Seckmeyer G., Seifert P., Schmalwieser A., Schwander H., Vanicek K., Weber M.: Comparison of models used for UV index calculations, *Photochemistry and Photobiology*, 67, 6, pp 657-662, 1998
- (42) Rettberg P., Horneck G., Strauch W., Facius R., Seckmeyer G.: Simulation of planetary UV radiation climate on the example of the early earth, *Adv.Space Res.* Vol. 22, No. 3, pp 335-339, 1998
- (43) Deguenther M., Meerkoetter R., Albold A., Seckmeyer G.: Case study on the influence of inhomogeneous surface albedo on UV irradiance, *Geophysical Research Letters*, Vol. 25, 3587-3590, 1998
- (44) Mayer B., Seckmeyer G.: Retrieving Ozone Columns from Spectral Direct and Global UV Irradiance Measurements, peer reviewed proceedings of the Quadrennial Ozone Symposium L'Aquila, ed. Rumen D.Bojkov and Guido Visconti, pp 935-938, 1998
- (45) Seckmeyer G., Mayer B., Bernhard G., Albold A., Erb R., Jaeger H., Stockwell W.R.: New Maximum UV Irradiance Levels Observed in Central Europe, *Atmospheric Environment*, Vol. 31, No 18, pp 2971-2976, July, 1997
- (46) Meerkoetter R., Wissinger B., Seckmeyer G.: Surface UV from ERS-2/GOME and NOAA/AVHR data: A case study, *Geophysical Research Letters*, 24, 15, pp 1939-1942, 1997

- (47) Zerefos C.S., Balis D.S., Bais A.F., Gillotay D., Simon P., Mayer B., Seckmeyer G.: Variability of UV-B at four stations in Europe, *Geophysical Research Letters*, Vol. 24, No. 11, pp 1363-1366, June, 1997
- (48) Bernhard G., Seckmeyer G.: New entrance optics for solar spectral UV measurements, *Technical Note, Photochemistry and Photobiology* 65(6), pp 923-930, 1997
- (49) Mayer B., Seckmeyer G., Kylling A.: Systematic longterm comparison of spectral UV measurements and UVSPEC modelling results, *Journal of Geophysical Research*, Vol.102, No. D7, pp 8755-8768, 1997
- (50) Bernhard G., B.Mayer, Seckmeyer G., Moise A.: Measurements of spectral solar UV irradiance in tropical Australia, *Journal of Geophysical Research*, Vol.102, No. D7, pp 8719-8730, 1997
- (51) Kylling A., Albold A., Seckmeyer G.: Transmittance of a cloud is wavelength-dependent in the UV-range: Physical Interpretation, *Geophysical Research Letters*, Vol.24, No.4, pp 397-400, February 1997
- (52) Mayer B., Seckmeyer G.: All-weather comparison between spectral and broadband (Robertson-Berger) UV measurements, *Technical Note, Photochemistry and Photobiology* 64(5): 792-799, November, 1996
- (53) Seckmeyer G., Albold A., Erb R.: Transmittance of a cloud is wavelength-dependent in the UV-range, *Geophysical Research Letters*, 23(20), 2753-2755, October 1996
- (54) Seckmeyer G., Bernhard G., Mayer B., Erb R.: High Accuracy Spectroradiometry of Solar UV Radiation, *Metrologia*, 1995/96, 32(6), 697-700, 1996
- (55) Horneck G., Rettberg P., Rabbow E., Strauch W., Seckmeyer G., Facius R., Reitz G., Strauch K., Schrott J.-U.: Biological dosimetry of solar radiation for different simulated ozone column thicknesses, *Journal of Photochemistry and Photobiology Biology B: Biology* 32, 189-196, 1996
- (56) Seckmeyer G., Mayer B., Bernhard G., McKenzie R.L., Johnston P.V., Kotkamp M., Booth C.R., Lucas T., Mestechkina T., Roy C.R.; Gies H.P.; Tomlinson D.: Geographical Differences in the UV Measured by Intercompared Spectroradiometers, *Geophysical Research Letters*, Vol. 22, No. 14, pp 1889-1892, July 15, 1995
- (57) McKenzie R.L., Blumthaler M., Booth C.R., Diaz S.B., Frederick J.E., Ito T., Madronich S., Seckmeyer G.: Surface Ultraviolet Radiation, in *Scientific Assessment of Ozone Depletion 1994: Chapter 9*, World Meteorological Organization, Global Ozone Research and Monitoring Project - Report No. 37, UNEP, P.O. Box 30552, Nairobi, Kenya, 1995
- (58) Blumthaler M., Webb A.R., Seckmeyer G., Bais A.F., Huber M., Mayer B.: Simultaneous Spectroradiometry: A Study of Solar UV Irradiance at two Altitudes, *Geophysical Research Letters*, 21, No.25, pp 2805-2808, 15 December, 1994
- (59) Seckmeyer G.; Thiel S., Blumthaler M., Fabian P., Gerber S., Gugg-Helminger A., Haeder D.-P., Huber M., Kettner C., Koehler U., Koepke P., Maier H., Schaefer J., Suppan P.,

Tamm E., Thomalla E.: Intercomparison of Spectral UV-Radiation Measurement Systems, Applied Optics, 33, 33, pp 7805-7812, November 1994

- (60) Seckmeyer G., Mayer B., Erb R., Bernhard G.: UV-B in Germany higher in 1993 than in 1992, Geophysical Research Letters, 21, 7, April 1, 1994
- (61) McKenzie R.L.; Kotkamp M.; Seckmeyer G.; Erb R.; Roy C.R.; Gies H.P.; Toomey S.J.: First Southern Hemisphere Intercomparison of Measured Solar UV Spectra, Geophysical Research Letters, 20, 20, 2222-2226, 1993
- (62) Seckmeyer G.; Payer H.D.: A New Sunlight Simulator for Ecological Research on Plants, J. Photochem Photobiol. B: Biol, 21, 175-181, 1993
- (63) Seckmeyer G.; McKenzie R.: Increased ultraviolet radiation in New Zealand (45°S) relative to Germany (48°N), Nature, Vol. 359, pp 135-137, September 1992
- (64) Seckmeyer G.: Spectral measurements of the variability of global UV-radiation, Meteorologische Rundschau, Gebrueder Borntraeger Verlagsbuchhandlung, Berlin, Stuttgart, 41, Heft 6, pp 180-183, 1989
- (65) Seckmeyer G.; Payer H.D.: Lichtschwankungen von wechselstrombetriebenen Lampen, Gartenbauwissenschaft, 53 (4), pp 188 - 191, 1988
- (66) Haeusler G.; Seckmeyer G.; Weiss T.: Chaos and cooperation in nonlinear pictorial feedback systems: Part 1: Experiments; Part 2: Stability; Part 3: Quantized feedback systems; Applied Optics Vol.25, No.24, p. 4656 - 4672, 1986

### **Further publications**

- (67) Seckmeyer G.: Bedeutung und Messung der UV-Strahlung fuer Photobiologie und Photochemie, Proceedings of an international symposium at Garmisch.-P. on "Verteilung und Wirkung von Photooxidantien im Alpenraum". April 1988.
- (68) Seckmeyer G.; Payer H.D.: Umweltsimulation fuer oekotoxikologische Pflanzenexperimente, Labor 2000/88, Vogel-Verlag (Wuerzburg), 196 - 211, 1988
- (69) Seckmeyer G.: Spektralradiometer fuer die oekologische Pflanzenforschung, Licht, 41, No. 7-8, 1989
- (70) Seckmeyer G.; Payer H.D.: Requirements for artificial irradiation of plants in closed chambers, in Air Pollution Research Report 26, Commission of the European Communities, 1990
- (71) Seckmeyer G.: Spektralradiometrie in der oekologischen Pflanzenforschung, Arbeitstagung zum Thema "UV-B-aenderungen: Ursachen, Ausmass, Wirkungen, Insel Vilm (Ruegen), 28 - 31 August 1991
- (72) Seckmeyer G.; Bernhard G.: Cosine error correction of spectral UV irradiances, in: Atmospheric Radiation (Stamnes, K., Hrg.) Europto Series Vol. 2049, Bellingham, 1993

- (73) Seckmeyer G.: Vergleichende Messungen der solaren UV-Strahlung mit dem GSF-Spektralradiometer, ISH-Bericht ISSN 0937-4558, BfS-ISH-163/93, Arbeitsgespräch solares UV-Monitoring, ed.: M.Steinmetz, Oktober 1993
- (74) Payer H.D.; Blodow P.; Koefflerlein M.; Lippert M.; Schmolke W.; Seckmeyer G.; Seidlitz H.; Strube D.; Thiel S.: Controlled Environment Chambers for Experimental Studies on Plant Responses to CO<sub>2</sub> and Interactions with Pollutants, in Design and Execution of Experiments on CO<sub>2</sub> Enrichment, Air Pollution Reports, Commission of European Communities, Design and Execution of Experiments on CO<sub>2</sub> enrichment, editors: E-D.Schulze; H.A.Mooney, pp 127-145, 1993
- (75) Seckmeyer G., Bernhard G., Erb R., Mayer B.: Comparative studies to increasing UV Doses in New Zealand (45°S) relative to Germany (48°N), Abstracts of Lectures and Posters, 21st National Cancer Congress of the German Cancer Society, supplement to Journal of Cancer Research and Clinical Oncology, Vol. 120, 1994
- (76) Seckmeyer G., Mayer B., Bernhard G.: Entwicklung und Einsatz von Referenzgeräten zur Messung der solaren UV-Strahlung, Proceeding des 4. Statusseminars des Ozonforschungsprogramms des BMFT, Bonn, July 1994
- (77) Seckmeyer G.; Kettner C.; Thiel S.: Checking ozone amounts by measurements of UV-irradiances, Proceedings of Quadrennial ozone Symposium, Charlottesville, Virginia, USA, June 4-13, 1994
- (78) Seckmeyer G.: Veränderung der UV-B-Strahlung, in Landwirtschaft, Studienprogramm, Band 1, Teilband II, Studie G, Enquetekommission "Schutz der Erdatmosphäre" des Deutschen Bundestags (ed.), Economia Verlag GmbH, Bonn, ISBN 3-87081-394-6, 1-24, 1994
- (79) Seckmeyer G., Mayer B., Bernhard G., Erb R.: Changes of Ultraviolet Radiation, in: Borrell P.M., Borrell P., Cvitas T., Seiler W. (eds), Proc. EUROTRAC Symp. '94, SPB Academic Publishing, The Hague 1994
- (80) Horneck G., Seckmeyer G., Simon P.: Biologically weighed dosimetry of solar UV radiation, in: J.Pyle, N.Harris, J.Buesing eds. Air Pollution Research Report 51, Stratospheric Chemistry and Ozone Depletion, Report EUR 15658 EN, European Commission, Brussels, pp. 103-105, 1994
- (81) Seckmeyer G., Mayer B., Erb R., Bernhard G.: Geographical differences of UV irradiances, in Proceedings of the first European symposium on "The effects of environmental UV-B radiation on health and ecosystem, eds.: H.Bauer and C.Nolan, Commission of European communities, pp. 21-27, 1995
- (82) Seckmeyer G., Mayer B., Bernhard G.: The German Reference Instrument for the Measurement of Solar UV-Radiation, in report of the WMO Meeting of Experts on UV-B Measurements, Data Quality and Standardization of UV Indices, les Diableret, Switzerland, 25-28 July 1994, WMO, Global Atmospheric Watch, No. 95, WMO/TD-No.625, 1995

- (83) Seckmeyer G.: Stand der Instrumentenentwicklung zur Messung von UV-B-  
Bestrahlungsstaerken, Proceeding des OFP- Statusseminars, 1995
- (84) Seckmeyer G., Mayer B., Bernhard G., Erb R.: UV-Monitoring in Germany: Past, Present and  
Future, in Measurement and Trends of Terrestrial UVB Radiation in Europe, OEMF s.p.a.,  
Milano, edited by Brian Diffey, ISBN 88-7076-174-6, pp 73-86, 1996
- (85) Horneck G., Rettberg P., Strauch W., Seckmeyer G., Mayer B., Simon P., Gillotay D.,  
Bolsee D.: Biologically weighted dosimetry by use of the biofilm technique, Proceedings of  
Third Symposium on Stratospheric Ozone Depletion, Schliersee, Germany, 18-22 September  
1995, Air pollution research report 56, Commission of European Communities, Directorate-  
General XII, Luxemburg, 1996
- (86) Jaeger H., Seckmeyer G., Mayer B., Sladkovitch R.: Observations at Garmisch-Partenkirchen  
Related to a Vortex Passage in January 1995, Proceedings of Third Symposium on  
Stratospheric Ozone Depletion, Schliersee, Germany, 18-22 September 1995, Air pollution  
research report 56, Commission of European Communities, Directorate-General XII,  
Luxemburg, 1996
- (87) Seckmeyer G., Mayer B., Bernhard G., Albold A., Erb R., Jaeger H., Stockwell W.R.:  
Measurement and calculation of UV-radiation (models and prognoses), in "Environmental  
UV-Radiation, Risk of Skin Cancer and Primary Prevention", Internationaler Kongress und  
Klausurtagung der Strahlenschutzkommission, Hamburg, 6.-8.Mai 1996, editor:  
Bundesministerium fuer Umwelt, Naturschutz und Reaktorsicherheit, Veroeffentlichung der  
Strahlenschutzkommission, Band 34, pp 35-58, 1996
- (88) McKenzie R.L., Johnston P.V., Seckmeyer G: UV Spectro-radiometry in the Network for the  
Detection of Stratospheric Change (NDSC), Proceedings of NATO Advanced Study Institute  
(ASI) "Solar Ultraviolet Radiation Modelling, Measurements&Effects", NATO ASI Series,  
Vol.I 52, pp 279-287, edited by Christos S.Zerefos and Alkiviadis Bais, Springer-Verlag  
Berlin Heidelberg, 1997
- (89) Seckmeyer G., Albold A., Mayer B.: Methods to derive geographical differences of UV  
irradiances, Proceedings of NATO Advanced Study Institute (ASI) "Solar Ultraviolet  
Radiation Modelling, Measurements&Effects", NATO ASI Series, Vol.I 52, pp 155-164,  
edited by Christos S.Zerefos and Alkiviadis Bais, Springer-Verlag Berlin Heidelberg, 1997
- (90) Seckmeyer G.: Scientific UV Data Management, in European stratospheric ozone research  
1996-97, Air pollution report 59, Report EUR 16987 EN, published by the European  
Commission, DGXII, 1997
- (91) Seckmeyer G.: The need for Detector-Based UV Radiometry for International Research  
Programs (e.g. WMO), in Proceeding of international workshop on detector based UV  
radiometry, ed. Physikalisch-Technische Bundesanstalt, Berlin, 1997
- (92) Pfister G., Putz E., Bernhard G., Seckmeyer G., Mayer B.: Comparison of High Resolution  
Spectral UV-Measurements with Disort Model Results Using Different Extraterrestrial  
Spectra, Proceeding of International Radiation Symposium in Fairbanks IRS'96, pp. 938-941,  
Alaska, USA, 1997

- (93) Seckmeyer G., Mayer B., Bernhard G., Albold A.: Evaluation of Radiative Transfer Models, Proceeding of International Radiation Symposium in Fairbanks IRS'96, pp. 861-864, Alaska, USA, 1997
- (94) Seckmeyer G.: Characterization and intercomparison of UV radiometers, in EC advanced study course: Biological UV dosimetry, a tool for assessing the impacts of UV radiation on health and ecosystems, European Commission, Environment and Climate Programme, Book of abstracts, 1998
- (95) Heikkilae, A., Albold A., Bernhard G., Gardiner B., Hurtta K., Kirsch P., Kylling A., Mayer B., Slaper H., Taalas P., Walravens B., Webb A., Seckmeyer G.: SUVDAMA Data Storage, Edition 4, Finish Meteorological Institute, 2 March, 1998
- (96) Seckmeyer G., Mayer B., Bernhard G. (editors): The 1997 Status of Solar UV-Spectroradiometry in Germany: Results from the National Intercomparison of UV-Spectroradiometers, with contributions from Albold A., Baum W., Dehne K., Feister U., Gericke K., Grewe R., Gross C., Sandmann H., Schreiber J., Seidlitz H.K., Steinmetz M., Thiel S., Wallasch M., Weller M.; Garmisch-Partenkirchen, Germany, Fraunhofer Institute for Atmospheric Environmental reserach, 55/98, ISBN: 3-8265-3695-9, 1998
- (97) Seckmeyer G.: Determination of UV indices with the EU-project "Scientific UV Data Management (SUVDAMA)", Report on the WMO-WHO Meeting of Experts on Standardization of UV Indices and their Dissemination to the Public, Les Diablerets, Switzerland, 22-25 July 1997, GAW-report, No. 127, 1998
- (98) Seckmeyer G.: Coordinated Ultraviolet Radiation Measurements, Radiation Protection Dosimetry, Nuclear Technology Publishing, Vol. 91, Nos 1-3, pp. 99-103, 2000
- (99) Groebner J., Blumthaler M., De-la-Casiniere A., Lenoble J., Philipona R., Seckmeyer G., Weihs P.: Solar UV Irradiance Variability characterized by simultaneous Spectrometry, in Proceedings of the Quadrannial Ozone Symposium, Sapporo 2002
- (100) McKenzie R.L., Seckmeyer G., Bais A., Madronich S.: Satellite retrievals of UV compared with ground-based measurements at Northern and Southern mid-latitudes, in Proceedings of *2nd SPARC General Assembly*, WMO, WCRP, Stratospheric Processes and their Role in Climate, 2002
- (101) Seckmeyer G., Bais A., Bernhard G., Blumthaler M., Eriksen P., McKenzie R.L., Roy C., Miyauchi M.: Instruments to measure solar ultraviolet radiation, part 1: spectral instruments, WMO-GAW report No.126, 2001
- (102) Seckmeyer G., Bais A., Bernhard G., Blumthaler M., Booth C.R., Lantz K., McKenzie R.L.: Instruments to measure solar ultraviolet radiation, part 2: Broadband instruments measuring erythemally weighted solar irradiance, WMO-GAW report No.164, 2005
- (103) McKenzie R., Bernhard G., Seckmeyer G.: Comparison of ultraviolet spectroradiometers in Antarctica, NDACC newsletter 2007, ed. Geir Braathen, WMO, 2008

- (104) Seckmeyer G., Pissulla D., Wuttke S.: Sky radiance in Hannover, Germany and at the German Antarctic station Neumayer, NDACC newsletter 2007, ed. Geir Braathen, WMO, 2008
- (105) Seckmeyer G., Smolskaia I., Pissulla D., Bais A., Tourpali K., Meleti C., Zerefos C.: Solar UV: Measurements and Trends, Proceedings of the Symposium for the 20<sup>th</sup> Anniversary of the Montreal Protocol, ed. C.Zerefos, Contopoulos G., Skalkeas G., Springer Science and Business Media B.V., 2009

### **Academic degrees**

- (106) Seckmeyer G.: Untersuchungen zur nichtlinearen Rueckkopplung von Bildern, Diplomarbeit an der Friedrich-Alexander-Universitaet Erlangen, 1985
- (107) Seckmeyer G.: Simulation der Globalstrahlung fuer Pflanzenversuche, Institut fuer Verfahrenstechnik und mathematisch-physikalische Grundlagen, Lehrstuhl fuer Physik der TU Weihenstephan, accepted 24.6.1991
- (108) Seckmeyer G.: Die genaue Messung und Simulation der solaren UV-Strahlung, Habilitationsschrift, TU Ilmenau, Maerz 1997

### **Research projects, reports**

- (109) Seckmeyer G., Payer H.D. (GSF, Germany), Warrington I.J. (DSIR, New Zealand), McKenzie R.L. (NIWA, New Zealand): Characterization of solar simulators and radiation condition in phytochambers, Bundesministerium fuer Bildung, Wissenschaft, Forschung und Technologie (BMBF), 1991-1997
- (110) Seckmeyer G., Bernhard G., Mayer B.: Development and application of reference instruments for the measurement of solar UV-B irradiance, final report, 01 LU 9306/5, 1993-1996
- (111) Seckmeyer G., Mayer B.: Klimaforschung - Variablilitaet der UVB-Strahlung in Bayern - automatisierte UVB-Messung, Abschlussbericht zum BayFORKLIM-Vorhaben, 1994
- (112) Bernhard G., Seckmeyer G., Erb R.: Gutachten ueber den spektralen Transmissionsgrad von Damenstrumpfhosen, Studie fuer Feinstrumpferwerke Oberlungwitz, 1994
- (113) Bernhard G., Seckmeyer G.: Measurment of spectral irradiance at Phytotron "Else" at the physics institute in Weihenstephan, 1994
- (114) Webb A.R., Gillotay D., Gardiner B., Blumthaler M., Reinen H., Svenoe T., Bais A., Seckmeyer G., Lenoble J., Weihs P., Foeke K.: Calibration and Maintenance of Standards for Solar UV Measurements (CAMSSUM), Contract No. EV5V-CT93-0353, Commission of European Communities (CEC), 1994-1995
- (115) Horneck G., Simon P., Seckmeyer G.: Biologically weighted Dosimetry of Solar UV Radiation, Contract No. EV5V-CT93-0342, CEC, 1994-1995

- (116) Seckmeyer G.: Development of an high accuracy instrument for the determination of solar UV radiation at the Zugspitze, Deutsche Bundesstiftung Umwelt, 1994-1995
- (117) Bernhard G., Seckmeyer G.: Gutachten ueber den Transmissionsgrad von Damenstrumpfhosen der Firma Falke", 1995
- (118) Seckmeyer G., Roy C. (ARL, Australia), Gies P. (ARL, Australia): comparative investigation of solar irradiance, BMBF, 1995-1997
- (119) Bais A., Gardiner B., Koskela T., Seckmeyer G., Blumthaler M., Gillotay D., Redondas A., Slaper H., Webb A.R., Svenoe T.: Standardisation of Ultraviolet Spectroradiometry in Preparation of a European Network (SUSPEN), CEC, 1995-1997
- (120) Scheel H.E., Seckmeyer G.: operation of instruments in the framework of the Global Atmosphere Watch (GAW) for the determination of the chemical composition of the atmosphere, Umweltbundesamt (UBA), 1996-1997
- (121) Seckmeyer G., Blumthaler M., Putz E., Weihs P., Gillotay D., Taalas P., Lenoble J., Dehne K., Gardiner B., Bais A., Cappellani F., Siani A., Kelder H., Slaper H., Kylling A., Kjeldstad B., Redondas A., Joseffon W.: Scientific UV Data Management (SUVDAMA), CEC, coordinator, 1996-1999
- (122) Simon P., Meerkoetter R., Seckmeyer G., Taalas P., Hansen G., Slaper H., Verdebout J.: Design and assessment of global, european, and regional scale spectral UV irradiance maps based on satellite data and ground measurements (MApping UV by Europe - MAUVE), CEC, 1998-1999
- (123) Blumthaler M., Weihs P., Seckmeyer G., Lenoble J., Froehlich K.: Characteristics of the UV radiation field in the Alps (CUVRA), CEC, 1998-1999
- (124) Seckmeyer G.: investigations of UV radiative transfer and UV measurement within the NDSC, BMBF, 1996-1999
- (125) Seckmeyer G.: investigation on the influence of the atmosphere on the UV irradiance at the ground, Bundesamt fuer Strahlenschutz, 1997-2000
- (126) Seckmeyer G., Blumthaler M., Putz E., Weihs P., Taalas P., Lenoble J., Slaper H., Kylling A., Kjeldstad B., Gardiner B., Bais A., Engelsen O., Webb A.R., Gillotay D., Siani A., Feister U., Steinmetz M., de la Casiniere, vanWeele M., Rembges D.: European database for Ultraviolet Climatology and Evaluation (EDUCE), Commission of European Communities, 2000-2004
- (127) Seckmeyer G.: Charakterisierung der spektralen Einstrahlungsbedingungen in der Antarktis hinsichtlich Klimaveränderung und Ozonabbau (CASE I-III(several independent reviews)), within research program „Antarktisforschung mit vergleichenden Untersuchungen in arktischen Eisgebieten“, Deutsche Forschungsgemeinschaft (DFG), 2001-2005
- (128) Bais A., Blumthaler M., Koskela T., Seckmeyer G., Slaper H., Webb A.: Quality Assurance of Spectral Ultraviolet Measurements in Europe Through the Development of a Transportable unit (QASUME), Commission of European Communities, 2001-2005

- (129) Seckmeyer G., Martin T., Lytinska Z., Borkowski J., Janouch M., Eerme K.: European database for Ultraviolet Climatology and Evaluation (EDUCE), extension for newly associated states (NAS), Commission of European Communities, 2003-2004
- (130) Pyle J. (Koordinator), ... (64 Partners), Seckmeyer G.: Stratosphere-climate links with emphasis on the UTLS, Commission of European Communities, 2004-2009
- (131) Seckmeyer G., Spectral solar radiation measurements and comparison with model calculations, contract of German Weather service (DWD), 2007-2009

## **Poster**

- (132) Seckmeyer G.: Spectral measurements of global UV-radiation Poster beim Quadriennial Ozone Symposium, Goettingen August 1989
- (133) Seckmeyer G.: Spectroradiometric measurements of photobiologically significant radiation, Postervortrag am Third Congress of the European Society fuer Photobiology, 27. August - 2. September 1989, Budapest, Hungary, 1989
- (134) Seckmeyer G.: Spectral measurements of UV-radiation Postervortrag bei der International Conference on environmental research with plants in closed chambers, Neuherberg, 9 - 11 October 1989
- (135) Seckmeyer G.; Thiel S.: Comparison of different radiative transfer models of global radiation, Bunsen-Discussion Meeting "Physics and Chemistry of the Atmosphere", Schliersee, 7-9 October, 1991
- (136) Seckmeyer G.; Mayer B.; Bernhard G.; Erb R.: Changes of ultraviolet radiation, Eurotrac Symposium '94, Garmisch-Partenkirchen, April 1994
- (137) Thiel S., Seckmeyer G.: Influences of resolution and wavelength accuracy on the determination of UV-B irradiances, Paris, May 1994
- (138) Blumthaler M., Webb A.R., Seckmeyer G., Bais A.F.: Simultaneous spectral UV measurements applied to the determination of the altitude effect, UV-B meeting of experts, les Diableret, Schweiz, 25-28 July 1994
- (139) Horneck G., Rettberg P., Strauch W., Seckmeyer G., Mayer B., Simon P., Gillotay D., Bolsee D.: Biologically weighted dosimetry by use of the biofilm technique, Third Symposium on Stratospheric Ozone Depletion, Schliersee, Germany, 18-22 September 1995
- (140) Jaeger H., Seckmeyer G., Mayer B., Sladkovitch R.: Observations at Garmisch-Partenkirchen Related to a Vortex Passage in January 1995, Third Symposium on Stratospheric Ozone Depletion, Schliersee, Germany, 18-22 September 1995
- (141) Seckmeyer G.: Has UV-radiation changed in recent years? International Congress on "Environmental UV-Radiation, Risk of Skin Cancer and Primary Prevention", Hamburg, May 6-8, 1996

- (142) Seckmeyer G., Mayer B., Bernhard G., Albold A., Erb R.: Hat sich die UV-B-Bestrahlung im Alpenraum veraendert?, Interpraevent, 24-28 Juni 1996
- (143) Seckmeyer G., Misslbeck M., Bernhard G., Albold A., Krings T., : Untersuchungen zum UV-Strahlungstransfer, OFP-Statusseminar, Bonn, 23.-24.6.1998
- (144) Seckmeyer G., Bernhard G., Albold A., Krings T., Misslbeck M.: Investigation of UV radiative transfer and UV measurements within the NDSC, European Conference on UV Radiation, Helsinki, Finland, 28 June - 3 July, 1998
- (145) Martin T.J., Seckmeyer G.: The Validation of Maps of UV Irradiance, European Symposium on Atmospheric Measurements from Space, 20-22 January 1999, ESTEC, Noordwijk, The Netherlands, 1999
- (146) Martin T.J., Ferragato M., Kaurola J., Siliyamo N., Taalas P., Seckmeyer G.: Storage, Retrieval and Quality Control of UV Radiation data within EDUCE, NDSC (network for the detection of stratospheric change) conference – celebrating ten years of stratospheric atmospheric research -, Archachon, France, September 2001
- (147) Wuttke S., Verdebout J., Seckmeyer G.: Validating and Developing an improved algorithm for satellite-derived UV Radiation, NDSC (network for the detection of stratospheric change) conference – celebrating ten years of stratospheric atmospheric research -, Archachon, France, September 2001
- (148) Seckmeyer G., Wuttke S., Smolskaia I., Pissulla D.: Investigation of the specific radiation conditions in Antarctica, yearly SCOUT meeting, Crete, Mai 2007
- (149) Pissulla D., Seckmeyer G. Wuttke S.: Sky radiance in Hannover, Germany and Antarctica, UV conference “one century of UV radiation research”, Davos, Switzerland, 18-20 September 2007
- (150) Werle P., Thiel S., Seckmeyer G.: Measurement of solar UV radiation at the NDACC primary station Zugspitze, UV conference “one century of UV radiation research”, Davos, Switzerland, 18-20 September 2007

### **Supervisions**

- (151) Thiel S.: Messung strahlungsphysikalischer Eigenschaften eines Sonnensimulators, Diplomarbeit, Sektion Physik der Ludwig-Maximilians-Universitaet Muenchen, Lehrstuhl Prof. Dr. Sizmann, March 1993
- (152) Bernhard G.: Einfluss von Diffusor-Eigenschaften auf die Bestimmung von Bestrahlungsstaerken im UV-Bereich: Versuchsaufbau, Messung und Korrekturverfahren, Diplomarbeit in allgemeiner Physik, Technische Universitaet Muenchen, Schriftenreihe des Fraunhofer-Instituts fuer atmosphaerische Umweltforschung; Bd. 22, ISBN 3-927548-61-8, September 1993
- (153) Rube S.: Absolute measurements of UV radiation in New Zealand relative to Germany, Studienarbeit, Kurs KT90 SU, Berufsakademie Karlsruhe, Fachrichtung Umwelt- und Strahlenschutz, Oktober 1993

- (154) Mayer T.: Entwicklung einer automatischen Sonnennachführung fuer spektralradiometrische Messungen. Diplomarbeit im Fachbereich 06 Feinwerk- und Mikrotechnik der Fachhochschule Muenchen, Januar 1996
- (155) Erb R.: Measurements of Spectral Solar Ultraviolet Radiation on Top of the Zugspitze, Diplomarbeit am Meteorologischen Institut der LMU Muenchen, 1996
- (156) Mayer B.: Messung und Modellierung der spektralen UV-Bestrahlungsstaerke in Garmisch-Partenkirchen, Dissertation an der Universitaet Ilmenau, November 1996
- (157) Bernhard G.: Die Genauigkeit von Messungen der solaren UV-Globalbestrahlungsstaerke bei verschiedenen Atmosphaerenbedingungen, Dissertation, Institut fuer Geophysik und Meteorologie der Universitaet Graz, April, 1997
- (158) Gengenbach C.: Entwicklung und Betrieb einer Sonnennachführung zur Messung der direkten Sonnenbestrahlungsstaerke und der diffusen Himmelsstrahlung, Diplomarbeit TU Muenchen, Physik-Department, April, 1998
- (159) Albold A.: Untersuchungen zum Strahlungstransfer im alpinen Gelaende, Dissertation, Institut fuer Meteorologie der Universitaet Freiburg, Februar 1999
- (160) Wuttke S.: Validating and Developing an Improved Algorithm for Satellite-derived UV Radiation, Diplom thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, June 2001
- (161) Studemund H.: Entwicklung und Einsatz eines Spektralradiometers zur Messung der solaren Strahlung, Diplom thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, January 2003
- (162) Wichers C.: Untersuchung hemisphaerischer Unterschiede der spektralen UV-Bestrahlungsstaerke, Diplom thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, February 2003
- (163) Ali T.: Spectral Radiance Distribution: From Luminance Measurements to Spectral Irradiance on tilted surfaces, Diplom thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, May 2003
- (164) Riedel J.: Entwicklung eines digitalen photogrammetrischen Kamerasystems fuer Untersuchungen des Strahlungstransfers in der Atmosphaere, Diplom thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, July 2003
- (165) Borsche M.: Auswertung der schraegen und vertikalen Saelendichte von und NO<sub>2</sub> und O<sub>3</sub> mit Hilfe der DOAS-Methode, Diplom thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, September 2003
- (166) Wuttke S.: Radiation conditions in an Antarctic environment, PhD thesis at physics department, Institute of Meteorology and Climatology, University of Hannover, October 2004

- (167) Hamann U.: Entwicklung des Monte-Carlo-Strahlungstransfermodells Prompt, Diplom thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, February 2005
- (168) Dikty S.: A Photogrammetric Approach to the Characterization of Clouds, Diplom thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, December 2005
- (169) Pisulla D.: Development of Instrumentation measuring sky radiance, Diplom thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, February, 2006
- (170) Mubarak R.: Geografische Unterschiede der spektralen Bestrahlungsstärke in Hannover und am toten Meer, Diplom thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, May, 2006
- (171) Wittemeier, T: Messung der spektralen Globalbestrahlungsstärke im nahen Infrarot, Diplom thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, May, 2006
- (172) Benze S.: Development of a Calibration Method for the Photogrammetric Determination of Clouds, Diplom thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, May, 2006
- (173) Haubenreißer K.: Anwendungen der 3D-Wolkenphotogrammetrie für ausgewählte meteorologische Fragestellungen, Diplom thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, March, 2007
- (174) Ropers M.: Entwicklung eines einsatzfähigen CCD-Array-Spektralradiometers, Diplom thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, March, 2007
- (175) Brakebusch M.: Development of an automated cloud detection method for advanced photogrammetric systems, Diplom thesis in physics, Institute of Meteorology and Climatology, University of Hannover, July, 2007
- (176) Glandorf M.: Untersuchungen zur Trenddetektion und zu hemisphärischen Unterschieden der spektralen Bestrahlungsstärke, PhD thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, July, 2007
- (177) Matuse C.: Optimum tilt angles of photovoltaic devices for different meteorological conditions, Diplom thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, April, 2008
- (178) Riechelmann S.: Messung von spektraler Bestrahlungsstärke und Strahldichte mit CCD-Array Geräten, Diplom thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, September, 2008

- (179) Anufrieva L.: Diffusorentwicklung und Messung der infraroten spektralen Bestrahlungsstärke der Sonne, Diplom thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, June 2009
- (180) Drüke S.: WMO document „Array Spektroradiometer“ – draft – Bachelor thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, September 2009
- (181) Lohse I.: Räumliche und zeitliche Variabilität der Globalstrahlung, Bachelor thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, September 2009
- (182) Beringer S.: Eine Studie zur Optimierung des Anstellwinkels einer Photovoltaikanlage, Diplom thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, September 2009
- (183) Huchzermeyer H.: Optimierung eines Spektralradiometers zur Entwicklung eines tragbaren Spektral-Erythemmers, Diplom thesis in meteorology, Institute of Meteorology and Climatology, University Hannover, September 2010
- (184) Schaefer S.: Grundlagen und Messmethoden bidirektionaler Verteilungsfunktionen, Bachelor thesis in meteorology, Institute of Meteorology and Climatology, University of Hannover, Oktober 2010
- (185) Stührmann A.: Entwicklung eines Systems zur Messung der Bidirektionalen Reflektanzfunktion, Diplom thesis in meteorology, Institute of Meteorology and Climatology, University Hannover, April 2011

### **Scientific presentations, courses**

- (186) Seckmeyer G.: Datenverarbeitung in der Spektralradiometrie fuer Pflanzenversuche, Asystsposium der Fa. Keithley, Muenchen, April 1988
- (187) Seckmeyer G.: Spectral measurements of global radiation, Vortrag am Int. Symposium Daylight and Solar Radiation Measurement, Berlin, 9 - 11 October 1989
- (188) Seckmeyer G.; Payer H.D.: Design of a new sunlight simulator for plant research, Vortrag am Int. Symposium Daylight and Solar Radiation Measurement, Berlin, 9 - 11 October 1989
- (189) Seckmeyer G.: Spektralradiometrie in der oekologischen Pflanzenforschung, Arbeitstagung zum Thema "UV-B-aenderungen: Ursachen, Ausmass, Wirkungen, Insel Vilm (Ruegen), 28 - 31 August 1991
- (190) Seckmeyer G.: Vergleichende Messungen der solaren UV-Strahlung mit dem GSF-Spektralradiometer, "Arbeitsgesprach "terrestrisches solares UV-Monitoring", BfS, Neuherberg 2.Juni 1992
- (191) Seckmeyer G.; Kettner C.; Thiel S.: Checking ozone amounts by measurements of UV-irradiances, Quadrennial ozone Symposium, Charlottesville, Virginia, USA, June 4-13, 1992

- (192) Seckmeyer G.: aenderung der UV-Strahlung an der Erdoberflaeche, im Journal Club der TU Garching, 5 Mai 1993
- (193) Seckmeyer G.: aendert sich die UV-Strahlung an der Erdoberflaeche? im Seminar "Nutzung solarer Energie und verwandte Fragen" der LMU, Lehrstuhl Prof. Dr. Sizmann, 18. Juni 1993
- (194) Seckmeyer G.; Bernhard G.: Cosine error correction of spectral UV irradiances, international symposium on High Latitude Optics 28 June - 2 July 1993, University of Tromsoe, Norway, 1993
- (195) Seckmeyer G.: Geographical differences of UV irradiances, in European Symposium on Effects of Environmental UV Radiation, Commission of the European Communities in Collaboration with GSF-Forschungszentrum fuer Umwelt und Gesundheit GmbH, Munich, 27. - 29. October 1993
- (196) Seckmeyer G.: Messung der UV-Strahlung in Europa und Neuseeland, Institut fuer Meteorologie und Geophysik, Universitaet Graz, 2. Dezember 1993
- (197) Seckmeyer G.: Zusammenhaenge zwischen aenderungen des atmosphaerischen Ozons und der UV-Strahlung, meteorologisches Kolloquium der Universitaet Muenchen, 2. Februar 1994
- (198) Seckmeyer G.: Vergleichende Untersuchungen zur zunehmenden UV-Exposition in Neuseeland (450S) und Deutschland (480N), 21st national cancer congress of the German Cancer Society, Hamburg, 11 March 1994
- (199) Seckmeyer G.: Neue Ergebnisse zur genauen Messung der natuerlichen UV-Strahlung, TU Ilmenau Fachgebiet Lichttechnik, Deutsche Lichttechnische Gesellschaft Bezirksgruppe Thueringen-Nordhessen, 21.4.1994
- (200) Seckmeyer G.: Indication for a higher than expected wavelength dependence on skin cancer, international symposium: ozone-sun-cancer, Paris, 17.5.1994
- (201) Seckmeyer G.: Entwicklung und Einsatz von Referenzgeraeten zur Messung der solaren UV-Strahlung, 4.Statusseminars des Ozonforschungsprogramms des BMFT, Bonn, 15.7.1994
- (202) Seckmeyer G.: The German Reference Instrument for the Measurement of Solar UV-Radiation, UVB-meeting of experts, les Diableret, Schweiz, July 26, 1994
- (203) Seckmeyer G., Bernhard G., Mayer B., Erb R.: High Accuracy Spectroradiometry of Solar UV Radiation, 5th International Conference on Radiometry, NEWRAD'94, Berlin, 20 September, 1994
- (204) Seckmeyer G.: Gibt es messbare aenderungen der UV-Strahlung durch aenderungen des Ozons?, Kuratoriumssitzung des IFU, Garmisch-Partenkirchen, 30.9.1994
- (205) Seckmeyer G.: Messung der UV-Strahlung fuer pflanzenphysiologische Anwendungen, Kolloquiumsvortrag am Julius-von-Sachs-Institut fuer Biowissenschaften der Universitaet Wuerzburg, 15.12.1994

- (206) Seckmeyer G.: Gibt es einen messbaren Anstieg der solaren UV-Strahlung?, Fachschule fuer Augenoptik, Muenchen, 20.12.1994
- (207) Seckmeyer G.: Requirements for Instruments Measuring Solar Ultraviolet Radiation, WMO/WHO/NOAA/CIRES International conference on "UV Measurements and Effects: A Collaborative Approach", May 3, 1995
- (208) Seckmeyer G.: Stand der Instrumentenentwicklung zur Messung von UV-B- Bestrahlungsstaerken, 5.OFP-Statusseminar, Bonn, 23. Juni 1995
- (209) Seckmeyer G.: ueber die genaue Messung der solaren UV-Strahlung, Kolloquium des Alfred-Wegener-Instituts, Bremerhaven, 29. Juni 1995
- (210) Seckmeyer G., Mayer B., Berhard G., Erb R.: UV-Monitoring in Germany: Past, Present and Future, 6th European Congress of Photobiology, Cambridge, 3 September 1995
- (211) Seckmeyer G.: Discussion on current status of UV reserach, third symposium on Statospheric Ozone Reserach, Schliersee, 18-22 Sept., 1995
- (212) Seckmeyer G.: Principles of quality assurance in atmospheric environmental research including examples for UV research, NATO Advanced Study Institute (ASI) "Solar Ultraviolet Radiation Modelling, Measurements&Effects", Halkidiki, Greece, 4 October 1995
- (213) Seckmeyer G.: Methods to derive geographical differences of UV irradiances, NATO Advanced Study Institute (ASI) "Solar Ultraviolet Radiation Modelling, Measurements&Effects", Halkidiki, Greece, 5 October 1995
- (214) Seckmeyer G., McKenzie R.: Current status of UV-measurements within the Network for the Detection of Stratospheric Change (NDSC), 6th annual Steering Committee meeting, Leuven, Belgium, 12 October 1995
- (215) Seckmeyer G.: Veraenderungen bei der UV-Strahlung, Podiumsdiskussion "Nichtparasitaer bedingte Blattverbraeunungen bei Gerste", Bayerische Landesanstalt fuer Bodenkultur und Pflanzenbau, Freising, 13.12.1995
- (216) Seckmeyer G.: Measurement and calculation of UV-radiation (models and prognoses, International Congress on "Environmental UV-Radiation, Risk of Skin Cancer and Primary Prevention", Hamburg, May 6, 1996
- (217) Seckmeyer G.: Messmethoden, Beobachtungen und Interpretation der solaren Ultraviolettstrahlung, 6.OFP-Statusseminar, Bonn, 4. Juli 1996
- (218) Seckmeyer G.: Evaluation of Radiative Transfer Models, International Radiation Symposium, IRS'96, Fairbanks, Alaska, 19-24 August 1996
- (219) Mayer B., Seckmeyer G.: Retrieving Ozone Columns from Spectral Direct and Global Irradiance Measurements, XVIII Quadrennial Ozone Symposium-96, L'Aquila, Italy, 12-21 September 1996

- (220) Seckmeyer G.: Deutsche Beitraege zu internationalen UV-Forschungsprogrammen, 1.nationaler SPARC-workshop, Meteorologisches Institut der FU Berlin, 10./11.Maerz 1997
- (221) Seckmeyer G.:The need for Detector-Based UV Radiometry for International Research Programs (e.g. WMO), international workshop on detector based UV radiometry, Physikalisch-Technische Bundesanstalt, Berlin, 14.4.1997
- (222) Seckmeyer G.: Meteorologische Grundlagen der Tageslichttechnik, Vorlesung an der Universitaet Ilmenau, 2.Juli 1997
- (223) Seckmeyer G.: Entwicklung und Einsatz von Referenzgeraeten zur Messung der solaren UV-B-Strahlung, Untersuchungen zum Strahlungstransfer und UV-Messungen im NDSC, Vortrag beim Statusseminar des deutschen Ozonforschungsprogramms, Bonn, 10.7.1997
- (224) Seckmeyer G.: Determination of UV indices with the EU-project "Scientific UV Data Management (SUVDAMA)", International conference on UV indices, by WMO, WHO, ICNIRP, les Diablerets, Switzerland, 22.Juli 1997
- (225) Jaeger H., Seckmeyer G.: Status report from alpine station Garmisch/Zugspitze, 8th NDSC Steering Committee Meeting, Ny Alesund, Norway, 25.August 1997
- (226) Seckmeyer G.: Spectral UV working group report, including WMO-SCC activities, Greek and German UV spectroradiometer intercomparison and satellite derived products, 8th NDSC Steering Committee Meeting, Ny Alesund, Norway, 26.August 1997
- (227) Seckmeyer G.: Die genaue Messung und Simulation der solaren UV-Strahlung, Kolloquiumsvortrag an der TU Ilmenau, 19. Dezember 1997
- (228) Seckmeyer G.: Characterization and intercomparison of UV radiometers, at EC advanced study course: Biological UV dosimetry, a tool for assessing the impacts of UV radiation on health and ecosystems, Bad Honnef, 28 January 1998
- (229) Seckmeyer G.: Bestimmung und Simulation der biologisch wirksamen UV-Strahlung, Vortrag im Rahmen des Graduiertenkollegs der Universitaet Hohenheim, 13 Februar 1998
- (230) Seckmeyer G.: Current needs for solar UV Spectroradiometry, 1.workshop of the thematic network for ultraviolet measurements, Helsinki, 2 March 1998
- (231) Seckmeyer G.: Requirements for UV maps for the Network for the Detection of Stratospheric Change, NDSC, presentation at the MAUVE workshope on the definition of surface UV radiation maps, 21.4.1998
- (232) Seckmeyer G.: Messung der UV-Strahlung, uebersichtsvortrag beim Statusseminar des deutschen Ozonforschungsprogramms, Bonn, 23.6.1998
- (233) Seckmeyer G.: Scientific UV Data Management - Highlights from the cooperation of 19 EU institutes, European Conference on UV Radiation, Helsinki, Finland, 28 June - 3 July, 1998

- (234) Seckmeyer G., Jaeger H.: Results from the NDSC alpine primary station Garmisch/Zugspitze, report at the NDSC steering committee meeting in Reunion Island, 1.12.1998
- (235) Seckmeyer G.: UV spectral working group report 1998, NDSC steering committee meeting in Reunion Island, 1.12.1998
- (236) Bernhard G., Mayer B., Seckmeyer G.: Novel Spectroradiometers tested at the German UV Quality Assurance Center: Results from an Intercomparison held in Garmisch-Partenkirchen in 1997, 1998 fall meeting of the American Geophysical Union, 8 December 1998
- (237) Seckmeyer G.: Normative activities within the WMO UV instrumentation group, presentation at the normative committee FNL7.5, Hanau, 8 December 1998
- (238) Seckmeyer G., Marin T.J., Albold A.: The influence of clouds on the variability of UV irradiance as a function of wavelength, Annual meeting of the European Geophysical Society (EGS), The Hague, 23.4.1999
- (239) Albold A., Mayer H., Seckmeyer G.: An approach to the prediction of UV radiation under clouds, Annual meeting of the European Geophysical Society (EGS), The Hague, 23.4.1999
- (240) Schwander H., Kaifel A., Koepke P., Seckmeyer G.: Modelling ultraviolet radiation for all kinds of cloudiness, Annual meeting of the European Geophysical Society (EGS), The Hague, 23.4.1999
- (241) Seckmeyer G.: How to calculate uncertainties of spectroradiometric measurements, workshop of the WMO Scientific Advisory Group for UV monitoring, Geneva, 28.4.1999
- (242) Seckmeyer G.: Improvement of UV remote sensing from satellites by validation with ground based measurements, IEEE 1999 International Geoscience and Remote Sensing Symposium, Hamburg, 1 July 1999
- (243) Seckmeyer G.: Clouds as modifiers of UV spectra at the ground, invited talk at IUGG in Birmingham, UK, 22 July 1999
- (244) Martin T.J., Seckmeyer G.: Recent results from EC project "Characteristics of UV radiation in the Alps (CUVRA)", at CUVRA workshop in Grenoble, France, 7 October 1999
- (245) Seckmeyer G.: Report of UV spectral group 1999, Steering Committee meeting of the Network for the Detection of Stratospheric Change (NDSC), Sapporo, Japan, 13 October 1999
- (246) Seckmeyer G.: Coordinated Ultraviolet Radiation Measurements, invited talk at the international UV-Workshop on Ultraviolet Radiation, Exposure, Measurement and Protection, Oxford, UK, 19 October 1999
- (247) Seckmeyer G.: solar UV radiation, course in summer semester 2000 at university of Hanover, May-July 2000
- (248) Seckmeyer G.: Variabilität der UV-Strahlung: Meßmethoden, weltweite Meßnetze und Interpretation. Fa. Beiersdorf AG, Hamburg, 23 May 2000

- (249) Seckmeyer G.: Die solare UV-Strahlung – eine interdisziplinäre Forschungsaufgabe zwischen Physik, Meteorologie, Biologie, Luftchemie und Medizin, Antrittsvorlesung, Physikalisches Kolloquium des Fachbereichs Physik, university of Hanover, 13 June 2000
- (250) Seckmeyer G.: Spektralradiometrische Messungen der solaren Strahlung, 3. Wissenschaftliches Symposium “Solarenergieforschung in Niedersachsen, Institut für Solarenergieforschung GmbH, Hameln/Emmerthal, 26 October 2000
- (251) Seckmeyer G.: Ways to establish a UV climatology – ground based and satellite approaches, invited talk, Stratospheric Processes and their Role in Climate (SPARC), 2<sup>nd</sup> SPARC General Assembly, Mar del Plata, Argentina, 10 November 2000
- (252) Seckmeyer G.: Ways to establish a UV climatology – ground based and satellite approaches, Australian Radiation Protection and Nuclear Safety Agency, Melbourne, Australia, 29 November 2000
- (253) Seckmeyer G.: Possibilities for the derivation of a UV climatology - ground based and satellite approaches, IASOS and CRC, Hobart, Australia, 1 December 2000
- (254) Seckmeyer G.: Radiation in the atmosphere, part I, course at university of Hannover in winter semester 2000/2001 - now
- (255) Seckmeyer G.: Remote sensing, part I, course at university of Hannover in winter semester 2000/2001 - now
- (256) Seckmeyer G.: Solar radiation in the atmosphere, a challenging task for physical research, Kolloquium for physics at the university of Wuerzburg, 29 January 2001
- (257) Seckmeyer G.: Radiation in the atmosphere, part II, course at university of Hannover in summer semester 2001 - now
- (258) Seckmeyer G.: Remote sensing, part II, course at university of Hannover in summer semester 2001 – now
- (259) Seckmeyer G.: UV-Datenverwertung, invited talk at the “Wissenschaftliches UV-Kolloquium, 200 Jahre solare UV-Strahlung: Geschichte und Perspektiven“, Institut für Strahlenhygiene, Bundesamt für Strahlenschutz, Neuherberg, 21 June 2001
- (260) Seckmeyer G.: Coupling between stratospheric change and surface UV radiation, invited talk at the NDSC (network for the detection of stratospheric change) conference – celebrating ten years of stratospheric atmospheric research -, Archachon, France, 24 September 2001
- (261) Seckmeyer G.: Lectures on solar radiation, UV instrumentation, Quality Assurance and Quality Control for UV measurements, course from GAW-TEC, Schneefernerhaus, Germany, 20 November 2001
- (262) Seckmeyer G.: Radiation in the atmosphere, part I, course at university of Hannover in winter semester 2002/2003, 2002

- (263) Seckmeyer G.: Derivation of solar radiation at the earth's surface by satellite data, GIS-Zentrum, Hannover, 9 January 2002
- (264) Seckmeyer G., S.Wuttke, H.Studemund: Das neue Spektralradiometer der Universität Hannover, 4. wissenschaftliches Symposium Solarenergie in Niedersachsen, Institut für Solarenergieforschung, Hameln-Emmerthal, 15 August 2002
- (265) Seckmeyer G.: European Database for Ultraviolet Radiation Climatology and Evaluation, symposium of the European Commission, Gotenberg, Sweden, 5 September 2002
- (266) Seckmeyer G.: Discussion on recent topics of interest in solar UV measurements, 5<sup>th</sup> workshop on Ultraviolet Radiation Measurements of the UV-net, Kassandra, Greece, invited review and lead of discussion, 7 October 2002
- (267) Seckmeyer G.: Führen Klimaänderung und Ozonabbau zu einer veränderten solaren Strahlung?, Presentation at department of physics and electrical engineering university Bremen, 16 January 2003
- (268) Seckmeyer G.: Gibt es noch das Ozonloch?, Saturday morning lecture, university Hannover, 1 February 2003
- (269) Seckmeyer G.: UV-Strahlung, Klimaveränderung und Ozonschicht – neue Erkenntnisse, scientific lecture at the Nivea skin research, Fa. Beiersdorf, lecture hall, research center, 14 February 2003
- (270) Seckmeyer G.: Kann man das Ozonloch vom Weltraum aus sehen?, Hölty-Gymnasium Wunstorf, 24 February 2003
- (271) Seckmeyer G.: Solare Strahlung – Stand und Perspektiven ihrer Erforschung, invited talk at the 67<sup>th</sup> German physics symposium, Hannover, Germany, 24 March 2003
- (272) Seckmeyer G.: Radiation in the atmosphere, part II, course at university of Hannover in summer semester 2003, 2003
- (273) Seckmeyer G.: remote sensing II, course at the university of Hannover in summer semester 2003, 2003
- (274) Seckmeyer G.: Was bestimmt die solare Strahlung – Stand und Perspektiven ihrer Erforschung, invited talk for German meteorological society; section Frankfurt, Zentralamt des DWD Offenbach, Germany, 14 May 2003
- (275) Kjeldstad B., Seckmeyer G. (Invited Paper): Topics of interest in solar UV measurements, SPIE conference, San Diego, USA, 4 August 2003
- (276) Seckmeyer G.: Topics of interest in solar UV measurements, symposium on UV radiation and the link to climate change during European conference on Photobiology, Vienna, 8 September 2003
- (277) Seckmeyer G.: Treibhausgase, Ozonloch und UV-Strahlung – Sind politische Antworten notwendig? Rotary Club Hannover, 13 February 2004

- (278) Seckmeyer G., Ali T., Bais A., Glandorf M., Kaurola J., Koskela T., Outer P.den, Siljamo N., Slaper H., Wuttke S.: Using the European Database for Ultraviolet Radiation, Quadrennial ozone symposium, Kos, Greece, 8 June 2004
- (279) Seckmeyer G., Smolskaia I.: Long-term prediction of UV radiation, kick-off meeting SCOUT project, Cambridge, 16 June 2004
- (280) Seckmeyer G.: New developments in UV research within the NDSC, NDSC steering committee meeting in Andoya, Norway, 16 September 2004
- (281) Seckmeyer G.: Sinnhaftigkeit der Minderung anthropogener CO<sub>2</sub>-Emissionen“, VDI Arbeitskreis Energietechnik in Hannover, Institut für Strömungsmaschinen, University of Hannover, 30 November 2004
- (282) Seckmeyer G., Kaurola J.: The European UV database – more than a simple data storage facility, first yearly SCOUT meeting, Zuerich, 10 March 2005
- (283) Seckmeyer G., A. Bais, G. Bernhard, M. Blumenthaler, C.R. Booth, K.Lantz, R.L. McKenzie, : Wuttke, S.; Smolskaia, I.: Broadband instruments measuring erythemally weighted solar irradiance - the new WMO UV instrumentation document, invited talk (solicited), European Geosciences Union (EGU), General assembly 2005, Vienna, 29 April 2005
- (284) Seckmeyer G.: The shortwave radiation with special emphasis on UV, 3th COSMOS meeting, Lueneburg, 31 May 2005
- (285) Seckmeyer G.: Broadband instruments, WMO guidelines and Antarctic applications, SPIE conference on remote sensing of the atmosphere, Bruges, Belgium, 21 September 2005
- (286) Seckmeyer G.: Open questions regarding spectral UV within the NDSC, NDSC steering committee meeting in Puerto de la Cruz, Tenerife, Spain, 8 November 2005
- (287) Seckmeyer G., Smolskaia I., Pisulla D.: Determination of spectral albedo in the Antarctic environment and evaluation of its impact on climate change (DESAC), DFG review meeting within the German Antarctic Program, Bremerhaven, 20 March 2006
- (288) Seckmeyer G.: Ist die solare Einstrahlung in der Antarktis anders als in Deutschland?, Stumeta symposium, 25 May 2006
- (289) Seckmeyer G.: UV instrumentation within WMO GAW and NDACC, 9. meeting of the baseline surface radiation network (BSRN), Lindenberg, Germany, 31 May 2006
- (290) Seckmeyer G., Wuttke S., Smolskaia I., Michel K.: Influence of surface reflectivity on radiation in the Antarctic Enviroment, invited talk, SPIE conference on remote sensing, Stockholm, Sweden, 13 September 2006
- (291) Seckmeyer G.: UV spectroradiometry within the NDACC, NDACC steering comittee meeting, OHP, France, 27 September 2006

- (292) Seckmeyer G., Smolskaia I., Wuttke S. Pissulla D.: Characterizing the radiation environment in Antarctica, invited talk, Yonsei University, Seoul, Korea, 8 November 2006
- (293) Seckmeyer G.: Characterizing the radiation climate, lesson for undergraduate students at Yonsei University, Seoul, Korea, 9 November 2006
- (294) Seckmeyer G., Smolskaia I., Wuttke S. Pissulla D.: Research experience on ultraviolet solar radiation in Antarctica, invited talk, Department of Physics, Silpakorn University, Nakhon Pathom, Thailand, 15 November 2006
- (295) Seckmeyer G., Overview for two review meetings for reports OR-2 and ORR-V3 with the Eumetsat Climate Satellite Application Facility, Satellite Application Facility on Climate Monitoring (CM-SAF) kick-off ceremony meeting, Berlin, 30 March 2007
- (296) Seckmeyer G., Wuttke S., Smolskaia I., Pissulla D.: Investigation of the specific radiation conditions in Antarctica, yearly SCOUT meeting, Heraklion, Greece, 9 May 2007
- (297) Seckmeyer G., Smolskaia I., Cordero R., Bais A.: Can we derive a trend in the UV reliably?, UV conference “one century of UV radiation research”, Davos, Switzerland, 18 November 2007
- (298) Blumthaler M., Schallhart B., Bais A., Balis D., Kazadzis S., Kazantzidis A., Kouremeti N., Webb A., Kift R., Seckmeyer G., Pissulla D., Rapsomanikis S., Wiegner M., Ruhtz T, Schmidhauser R., Cede A., Herman J.: The SCOUT UV-aerosol campaign 2006, UV conference “one century of UV radiation research”, Davos, Switzerland, 19 November 2007
- (299) Seckmeyer G., Bais A., Tourpali K., Taalas P., Zerefos C.: Solar UV:Measurements and Trends, invited talk, 20<sup>th</sup> Anniversary of the Montreal Protocol, Scientific Symposium “Ozone Depletion: from its discovery to Envisat and Aura, Greece, 25 September 2007
- (300) Seckmeyer G.: Variability of solar radiation at the earth’s surface – does it change?, invited talk, NOAA seminar, Boulder, Co, USA, 27 November 2007
- (301) Seckmeyer G., McKenzie R.: UV Spectroradiometry with the NDACC, NDACC steering committee meeting, Hawaii, USA, 4 December 2007
- (302) Seckmeyer G., Bais A.: Main findings in UV radiation research with SCOUT-O3, 4<sup>th</sup>, SCOUT-O3 Annual meeting, Potsdam, invited talk, 22 April 2008
- (303) Seckmeyer G.: Über die die Variabilität der solaren Strahlung an der Erdoberfläche – ändert sich etwas?, Deutscher Wetterdienst, Zweiverein Hamburg, Seewetteramt, Hamburg, invited talk, 3 June 2008
- (304) Seckmeyer G.: UV Variability as a key to assess and understand UV changes, Quadrennial ozone symposium, Tromsø, Norway, 2 July 2008
- (305) Seckmeyer G.: Recent advances in understanding the geographical distribution of solar radiation, workshop “Space technology, including satellite remote sensing.: Prospective and horizons” and extended Meeting of the Advisory Council, Tartu, Estonia, 26 August 2008

- (306) Seckmeyer G.: Wechselwirkung von UV und Ozon und Folgen für den Menschen, 4th German skin cancer kongress, Berlin, invited talk, 25 September 2008
- (307) Seckmeyer G.: Variations in solar UV radiation in New Zealand and in Europe - is it different and are there implications for health?, School of Population Health, University of Auckland, 14 October 2008
- (308) Seckmeyer G., McKenzie R.L.: How extreme is the UV radiation in New Zealand compared to Europe?, 2008 New Zealand Hydrological Society & Meteorological Society New Zealand, Joint Annual Conference, 18 - 20 November, Shantytown/Greymouth, West Coast, 18 November 2008
- (309) Seckmeyer G.: UV in Europe and New Zealand – results with contributions from Hannover published in the years 2005-2008, COST 726 Final Semiar, Warsaw, Poland, 14 May 2009
- (310) Seckmeyer G.: Meßnetze für Solarstrahlung, 14. Symposium der deutschen Akademie für Photobiologie und Phototechnologie e.V. und der Gesellschaft für technische und medizinische Anwendungen optischer Strahlung, 3 July 2009
- (311) Seckmeyer G., Riechelmann S.: Neue WMO Richtlinien zur Messung und Ableitung meteorologischer Größen mit Hilfe von UV-Strahlungsmessungen, DACH, Bonn, 22. September 2010

### **Peer Reviews**

usually contains several reviews per journal within a year

- (312) Seckmeyer G.: Photochemistry and Photobiology
- (313) Seckmeyer G.: Geophysical Research Letters
- (314) Seckmeyer G.: review of CEC document "European Research in the Stratosphere: the contribution of EASOE and SESAME to our current understanding of the ozone layer", 1996
- (315) Seckmeyer G.: Theoretical and Applied Climatology
- (316) Seckmeyer G.: Atmospheric Environment
- (317) Seckmeyer G.: Review of Scientific Assesment of Climate Change (IPCC) 1998, Chapter 5: Solar Ultraviolet Irradiance at the Ground, 1998
- (318) Seckmeyer G.: Journal of Geophysical Research
- (319) Seckmeyer G.: Journal of Photochemistry and Photobiology, B: Biology
- (320) Seckmeyer G.: Advances in Space Research
- (321) Seckmeyer G.: Proposal evaluation of the Announcement of Opportunity for the Exploitation of ENVISAT data, 1998

- (322) Seckmeyer G.: Applied Optics
- (323) Seckmeyer G.: Journal of Atmospheric Chemistry
- (324) Seckmeyer G.: Optical Engineering
- (325) Seckmeyer G.: Atmospheric Chemistry and Physics (ACP)
- (326) Seckmeyer G.: Report on "Environmental Effects of Ozone Depletion and Interactions with Climate Change", United Nations Environmental Program (UNEP), 2006
- (327) Seckmeyer G.: Atmospheric research

### **Organisation of scientific meetings and conferences**

- (328) Seckmeyer G.: First Intercomparison of Ultraviolet Spectroradiometers, Neuherberg, Germany, 7.7. - 14.7.1990
- (329) Seckmeyer G.: Third European Intercomparison of Ultraviolet Spectroradiometers, Garmisch-Partenkirchen, Germany, 19.-31.7.1993
- (330) Seckmeyer G.: International Intercomparison of Ultraviolet Spectroradiometers, Garmisch-Partenkirchen, Germany, 1.8. - 15.8.1994
- (331) Seckmeyer G.: Final meeting of the EU-project "Biologically weighed dosimetry of solar radiation", 7-8 December 1995
- (332) Seckmeyer G.: Workshop on broadband UV measurements, Garmisch-Partenkirchen, 22-23 April 1996
- (333) Seckmeyer G.: Third meeting of the WMO UV Scientific Steering Committee, Garmisch-Partenkirchen, Germany, 24-26 April 1996
- (334) Breitbart E.W., Reiners Chr., Greinert R. Volkmer B., Seckmeyer G., Matthes R.: International Congress on "Environmental UV-Radiation, Risk of Skin Cancer and Primary Prevention" (Member of program committee), Hamburg, May 6, 1996
- (335) Seckmeyer G., Albold A.: First workshop of EU-Project: "Scientific UV Data Management (SUVDAMA)", Garmisch-Partenkirchen, Germany, 23-25 October 1996
- (336) Seckmeyer G., Mayer B., Bernhard G., Albold A., Misslbeck M.: German Intercomparison of Ultraviolet Spectroradiometers, Garmisch-Partenkirchen, Germany, 4.8. - 15.8.1997
- (337) Seckmeyer G., Taalas P.: Workshop on open scientific questions establishing a UV-network (SUVDAMA extra meeting), Helsinki, 4-5 March, 1998
- (338) Taalas P., Amanatidis G., Bais A., Borkowski J., Gardiner B., Horneck G., Kjeldstad B., Lenoble J., Seckmeyer G., Simon P.: European Conference on Atmospheric UV Radiation (ECUV), Helsinki, Finland, 29 June - 2 July, 1998

- (339) Seckmeyer G., J-P. Schnitzler, E.Leibrock: wissenschaftliches Seminar des Fraunhofer Institutes fuer atmosphaerische Umweltforschung, 1997, 1998
- (340) Seckmeyer G., Albold A., Putz E.: Third meeting of SUVDAMA, Schloß Seggau, Austria, 28-30 September 1998
- (341) Seckmeyer G., Martin T., Mueller M., Albold A.: European Campaign in the framework of projects "Design and assessment of global, european, and regional scale spectral UV irradiance maps based on satellite data and ground measurements (MAPPING UV by Europe" (MAUVE) and "Characteristics of the UV radiation field in the Alps" (CUVRA), March 1999
- (342) Seckmeyer G., Martin T., Weihs P.: First meeting of the EU funded project "European database for Ultraviolet Climatology and Evaluation" (EDUCE), Vienna, Austria, 3-6 October 2000
- (343) Seckmeyer G., Martin T., de la Casiniere.: Second meeting of EDUCE, Bordeaux, France, 20-22 September 2001
- (344) Seckmeyer G., Martin T., Kaurola J.: Third meeting of EDUCE, Sariselmä, Finland, 26-28 March 2003
- (345) McKenzie R.L., Seckmeyer G.: Symposium on UV radiation and the link to climate change during European conference on Photobiology, Vienna, 8 September 2003
- (346) Seckmeyer G., Ali T., Lapeta B.: Fourth meeting of EDUCE, Krakow, Poland, 1-3 October 2003
- (347) Seckmeyer G., D.Pisulla, I.Smolskaia: meeting of the subgroup on spectral UV of the network for the detection of atmospheric composition change (NDACC), 26 June 2006
- (348) Seckmeyer G., D.Pisulla, I.Smolskaia: UV instrumentation group meeting, WMO-GAW SAG, 26.-27. June 2006
- (349) Seckmeyer G. (chair): Review of operation report 2, Satellite Application Facility on Climate Monitoring (CM-SAF), January 2007
- (350) Seckmeyer G. (chair): Review of operation readiness report, version 3, Satellite Application Facility on Climate Monitoring (CM-SAF), January 2007
- (351) Gröbner J., Rozanov E., Köpke P., Kjeldstad B., Blumthaler M., Krotkov N., Seckmeyer G. (scientific committee): UV conference "one century of UV radiation research", Davos, Switzerland, 18-20 September 2007
- (352) I.Isaksen, C.Zerefos, D.Wuebbles, C.Granier, S.Godin-Beekman, N.Harris, W.Sharobim, F.Stordal, Wang, P.Laj, V.Fioletov, G.Bodeker, G.Brasseur, M.Dameris, M.Schultz, G.Seckmeyer: Quadrennial ozone symposium, Tromsø, Norway, 30 June – 6 July 2008

## Committees

- (353) Seckmeyer G.: Mitglied des Ausschusses fuer nichtionisierende Strahlung der Strahlenschutzkommission, Bundesministerium fuer Umwelt, 1994-1997
- (354) Seckmeyer G.: Member of the WMO Scientific Steering Committee for UV, 1994, 1995, 1996, 1997
- (355) Seckmeyer G.: Member of the WMO Scientific Advisory Group (SAG) (former WMO Steering Committee for UV), since 1998
- (356) Seckmeyer G.: chairman of WMO working group in UV instrumentation, since 1994
- (357) Seckmeyer G.: Koordinator im Leitthema 4 "UV-B-Strahlung" im Ozonforschungsprogramm des Bundesministeriums fuer Bildung, Wissenschaft, Forschung und Technologie (BMBF), 1995-1999
- (358) Seckmeyer G.: Ressortuebergreifender UV-Koordinierungsausschuss, BMBF, BMU, BMW, since 1995
- (359) Seckmeyer G.: Member of the Steering Committee of the Network for the Detection of Stratospheric Change (NDSC), since October 1995
- (360) Seckmeyer G.: member of the national SPARC- (Stratospheric Processes And their Role in Climate) committee, since March 1997
- (361) Seckmeyer G.: member of the scientific advisory committee for the UV reference laboratory, Joint Research Center, Commission of European Communities, Ispra, Italy, since 2001
- (362) Seckmeyer G.: Inclusion of biography in Marquis Who's Who in the World, Millenium editions 2000, 2002, 2007
- (363) Seckmeyer G.: member of the Advisory Council of ESTSPACE, project for developing estonian space technologies, supported by the European Commission, 2008-2011