

Dr. Dirk W. Lachenmeier (food chemist and toxicologist), CVUA Karlsruhe, Germany

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Dr. Dirk W. Lachenmeier is state-certified food chemist, toxicologist, director of the department of plant-based foods and co-head of the nuclear magnetic resonance (NMR) laboratory at Chemical and Veterinary Investigation Agency, Karlsruhe, Germany.



Education

Dr. Lachenmeier studied food chemistry (first state examination) at the [University of Bonn](#) (1994-1998), followed by position as first-year resident at various food control institutions in the State of North Rhine-Westfalia, concluding the studies with the second state examination and title of state-certified food chemist (Münster, 2000). He carried out his PhD in Forensic Toxicology at the [Institute of Legal Medicine](#), University of Bonn (2000-2003). His PhD research included the development of an innovative methodology to detect cannabis and designer drugs in hair samples^[1].

Career

Since 2003, Dr. Lachenmeier is employed at the [Chemical and Veterinary Investigation Agency](#) Karlsruhe (CVUAKA), Germany, where he first headed the alcohol laboratory (2003-2012), and later was promoted as director of the department of plant-based food, where he is personally heading the Central State Coffee Control Laboratory and the Central State Cannabis Control Laboratory, and his group includes a team of scientists and technicians investigating various matrices such as tea, spices, bakery and pasta products, food supplements, and products for special nutritional demands (diets). At CVUAKA he also co-heads the nuclear magnetic resonance (NMR) laboratory since 2010 and his department is responsible for the fields "novel food products" and "internet trade". Dr. Lachenmeier has

been working as official on secondment at the [Ministry of Rural Affairs and Consumer Protection Baden-Württemberg](#) (2012-2013).



Research Projects

Apart from various in-house projects, Dr. Lachenmeier contributed to the EU FP7 projects [AMPHORA \(Alcohol Measures for Public Health Research Alliance\)](#) (2009-2012) and [ALICE-RAP \(Addictions and Lifestyles In Contemporary Europe – Reframing Addictions Project\)](#) (2011-2016), for which he was avocationally working as scientist at the [Institute of Clinical Psychology and Psychotherapy, Technical University of Dresden, Germany](#). The projects allowed Dr. Lachenmeier to achieve major conclusions on the composition and health risk of unrecorded alcohol, as well as on the comparative risk assessment of alcohol and drugs^{[2][3][4][5]}.

Expert work for WHO IARC

Since 2007, Dr. Lachenmeier has regularly contributed to working groups of the [monographs program of the World Health Organization's International Agency for Research on Cancer \(IARC\)](#). At several meetings he was responsible as sub-group head for the exposure or epidemiology sections of the meetings. The contributions were included in the following IARC monographs and reports:

- [Volume 96](#) (2010) Alcohol Consumption and Ethyl Carbamate
- [Volume 101](#) (2012) Some Chemicals Present in Industrial and Consumer Products, Food and Drinking-water
- [Volume 108](#) (2015) Some Drugs and Herbal Products
- [Volume 116](#) (2018) Drinking Coffee, Mate, and Very Hot Beverages
- [Volume 119](#) (2019) Some Chemicals That Cause Tumours of the Urinary Tract in Rodents
- [Advisory Group to Recommend Priorities for the IARC Monographs during 2020–2024](#) (2019)
- [Report of the Advisory Group to Recommend an Update to the Preamble to the IARC Monographs](#) (2019)

Productivity

Dr. Dirk Lachenmeier has more than 400 articles in international refereed journals and books, including the *Lancet*^[6], the *Lancet Oncology*^{[7][8][9][10][11][12]}, the *Lancet Gastroenterology & Hepatology*^[13], the *Journal of the National Cancer Institute*^[14], the *International Journal of Cancer*^{[15][16][17]}, the *British Medical Journal*^[18], *BMC Medicine*^[19], *BMC Cancer*^{[20][21]}, *Addiction*^{[2][22][23][24][25][26][27]} and more than 100 other journals. According to [Google Scholar](#) (March 2020), the publications of Dr. Lachenmeier achieved 11.266 citations, his h-index is 56 and his i10-index is 199. The ten publications with the highest number of citations are Refs^{[11][28][29][5][30][22][31][32][33][34]}. According to [Laborjournal](#), Dr. Lachenmeier is listed among the highest-cited researchers in Germany in toxicology. For full publication list, see [Research Gate](#).

Awards

Dr. Lachenmeier received the Award of the Fonds of Chemical Industry (1994) for his university-entrance diploma in chemistry. In 2005, he received the [Bruno-Rossmann-Award of the Food Chemical Society](#) for the study "Rapid

screening for ethyl carbamate in stone-fruit spirits using FTIR spectroscopy and chemometrics"^[35]. For his peer reviewing activity of more than 600 reviews according to [Publons](#), Dr. Lachenmeier was among the top reviewers in cross-field (September 2019), top reviewers for agricultural sciences (September 2018), top reviewers in Germany (September 2017), top reviewers for agricultural and biological sciences (September 2017), top reviewers for pharmacology, toxicology and pharmaceuticals (September 2017), sentinels of science: chemistry (September 2016), top reviewers for Germany (Jan 2016-Apr 2016), top reviewers for Publons (Oct 2014-Jan 2016).

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Keywords

unrecorded alcohol; NMR; biography; cannabis; food chemistry; risk assessment; toxicology; cancer



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