



# Werner M. Nau

Date of birth: May 22, 1968 Nationality: German

Position: Professor of Chemistry, Jacobs University, Bremen (Germany)

**Education**: 1987–1990 Undergraduate in Chemistry, University of Würzburg (Germany)

> 1990-1991 Graduate studies (MSc) in Chemistry, St. Francis Xavier University (Canada) 1992-1994 PhD in Chemistry with Prof. Waldemar Adam, University of Würzburg 1994–1995 Postdoctoral research with Prof. J. C. Scaiano, University of Ottawa (Canada)

1996–1999 Habilitation with Prof. Jakob Wirz, University of Basel (Switzerland)

**Professional** 1998 Visiting Professor of Pure and Applied Sciences, St. Francis Xavier University, Antigonish,

associations: Nova Scotia (Canada)

2000–2002 SNSF Professor of Chemistry, University of Basel (Switzerland)

2001 Visiting Professor of Organic Chemistry, University of Wisconsin, Madison (USA)

2002–Present Professor of Chemistry, Jacobs University, Bremen (Germany)

Awards: 2000 Grammaticakis-Neumann Prize

2002 ADUC-Jahrespreis

2002 Werner Prize of the Swiss Chemical Society

**Current research** 

Development of new applications of fluorescent probes in supramolecular and biochemistry by combining organic synthesis of dyes and macrocyclic hosts with time-resolved transient interests

> absorption and emission laser spectroscopy; modeling of complex kinetics and equilibria; development of fluorescence-based techniques to measure the flexibility of peptides and oligonucleotides and monitor diffusion in lipid-bilayer membranes; dynamics of host-guest complexation and solution structures of host-guest complexes; application of cucurbiturils as

photostabilizers and for drug delivery.

Hobbies: Football, skiing, bowling, playing chess and Skat (a strategic German card game)



W. M. Nau

### I chose chemistry as a career because...the registered mail with my application to study biology never arrived at central admissions.

The three things I would take to a desert island would be...a beach towel, a surf board, and my iPhone (even if there is no connection).

f I wasn't a scientist, I would be...a master craftsman. I like to fix and repair things.

My most exciting discovery to date has been...the development of new enzyme assays, in which simple synthetic macrocycles can substitute specific antibodies.

My biggest motivation are...my co-workers, who surprise me so often with interesting results.

The secret of being a successful scientist is...to always have an eye on the details.

would have liked to have discovered...the Tomb of Tutankhamun, America, and penicillin.

My favorite food is...a good steak with red wine, and no hurry.

My worst habit is...that I walk into the lab too often to ask each co-worker "what's new", even if I asked the same question 2 hours ago—I'm just too curious.

### The author presented on this page has recently published his 10th article since 2000 in Angewandte Chemie:

"Activation and Stabilization of Drugs by Supramolecular pK<sub>a</sub> Shifts: Drug-Delivery Applications Tailored for Cucurbiturils": N. Saleh, A. L. Koner, W. M. Nau, Angew. Chem. 2008, 120, 5478-5481; Angew. Chem. Int. Ed. 2008, 47, 5398-5401.

## My five top papers:

- 1. "Polarizabilities Inside Molecular Containers": C. Marquez, W. M. Nau, Angew. Chem. 2001, 113, 4515-4518; Angew. Chem. Int. Ed. 2001, 40, 4387-4390—featured on the cover (see above right).
- 2. "A Conformational Flexibility Scale for Amino Acids in Peptides": F. Huang, W. M. Nau, Angew. Chem. 2003, 115, 2371-2374; Angew. Chem. Int. Ed. 2003, 42, 2269-2272.
- 3. "Ultrastable Rhodamine with Cucurbituril": J. Mohanty, W. M. Nau, Angew. Chem. 2005, 117, 3816-3820; Angew. Chem. Int. Ed. 2005, 44, 3750-3754.
- 4. "Label-Free Continuous Enzyme Assays with Macrocycle-Fluorescent Dye Complexes": A. Hennig, H. Bakirci, W. M. Nau, Nature Methods 2007, 4, 629-632.
- 5. "Supramolecular Tandem Enzyme Assays for Use in Multiparameter Sensor Arrays and for Enantiomeric Excess Determination of Amino Acids": D. M. Bailey, A. Hennig, V. D. Uzunova, W. M. Nau, Chem. Eur. J. 2008, 14, 6069-6077.

DOI: 10.1002/anie.200805886