

BIBLIOGRAPHICAL SKETCH -
PROFESSOR CHARALAMPOS TSAKMAKIS

1. ADDRESS

Department of Civil-Engineering and Geodesy, Institute of Continuum Mechanics, TU Darmstadt
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2. PERSONAL DATA

Born in 1955 in Thessaloniki, Greece, married, two children

3. EDUCATION

Enrolled in Technische Hochschule Darmstadt 1974-1982; received degree of Dipl.-Ing. in Mechanical Engineering 1982; Ph.D. (Mechanics) from Technische Hochschule Darmstadt 1987; Habilitation in Mechanics from Gesamthochschule Kassel - Universität 1994.

4. EMPLOYMENT

Mechanical Engineer at Technische Hochschule Darmstadt in the Institute of Mechanics 1982-1991; Mechanical Engineer at Gesamthochschule Kassel in the Institute of Mechanics 1991-1992; Head of the Department of Material Research in the Institute of Material Research at Forschungszentrum Karlsruhe 1992-1997; Professor of Mechanics, TU Darmstadt, and Head of the Department of Material Research in the Institute of Material Research at Forschungszentrum Karlsruhe 1997-2002; Professor of Mechanics, TU Darmstadt 2002 – now.

5. AREAS OF EXPERTISE

General Continuum Mechanics and Thermodynamics, modeling of constitutive properties, determination on material parameters, numerical implementation of constitutive models, experimental identification of constitutive properties of solid materials, stability, bifurcation.

6. PUBLICATIONS

6.1 PUBLICATIONS AS JOURNAL ARTICLES (REVIEWED)

P. Haupt, Ch. Tsakmakis: "On kinematic hardening and large plastic deformations", Int. J. Plasticity 2 (1986) 279-293

P. Haupt, Ch. Tsakmakis: "On the principle of virtual work and rate-independent plasticity", Arch. Mech. 40 (1988) 395-406

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- Ch. Tsakmakis: "An analysis of rate- and material parameter-dependent limiting cases in viscoplasticity laws", *Int. J. Solids Structures* 33 (1996) 149-166
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- M. Korzen, Ch. Tsakmakis: "Uniaxial ratchetting in linear viscoelasticity", *Acta Mech.* 120 (1997) 157-172
- M. Kamlah, M. Korzen, Ch. Tsakmakis: "Uniaxial ratchetting in rate-independent plasticity laws", *Acta Mech.* 120 (1997) 173-198
- N. Huber, D. Munz, Ch. Tsakmakis: "Determination of Young's modulus by spherical indentation", *J. Mat. Res.* 12 (1997) 2459-2469
- R. Elsässer, M. Kamlah, Ch. Tsakmakis: "Finite element investigations of the dynamical properties of microstructure membranes", *Microsystem Technologies*, 3 (1997) 171-177
- N. Huber, Ch. Tsakmakis: "A finite element analysis of the effect of hardening rules on the indentation test", *J. Engng. Mater. Technol.*, 120 (1998) 143-148
- A. Ilzhöfer, H. Schneider, Ch. Tsakmakis: "Tensile testing device for microstructured specimens", *Microsystem Technologies*, 4 (1997) 46-50
- N. Huber, Ch. Tsakmakis: "Experimental and theoretical investigation of the effect of kinematic hardening on spherical indentation testing machine", *Mech. Materials*, 27 (1998) 241-248
- M. Kamlah, Ch. Tsakmakis: "Phenomenological modeling of the nonlinear electro-mechanical coupling in ferroelectrics", *Int. J. Solids Structures*, 36 (1999) 669-695
- E. Diegele, W. Jansohn, Ch. Tsakmakis: "Finite deformation plasticity and viscoplasticity laws exhibiting nonlinear hardening rules. Part I: Constitutive theory and numerical integration", *Computational Mechanics*, 25 (2000), 1-12
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- H. Lämmer, Ch. Tsakmakis: "Discussion of coupled elastoplasticity and damage constitutive equations for small and finite deformations", *Int. J. Plasticity*, 16(5) (2000), 495-523
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6.2 PUBLICATIONS IN CONFERENCE BOOKS (REVIEWED)

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6.3 PUBLICATIONS IN CONFERENCE BOOKS (NOT REVIEWED)

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- Ch. Tsakmakis: "Ein Modell zur Beschreibung des anisotropen Verhaltens von metallischen Werkstoffen", in "Große plastische Formänderungen", ed. O.T. Bruhns, Bad Honnef (1985), Ghk-Institut für Mechanik, Mitteilung Nr.3, 17-22

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P. Haupt, Ch. Tsakmakis: "Einige grundsätzliche Eigenschaften von plastischen und viskoplastischen Materialmodellen", ZAMM 69(1989) T509-T511

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