

## **Philippe M. Fauchet**

Professor and Chair, Department of Electrical and Computer Engineering  
Director, Center for Future Health  
Affiliated Faculty, Biomedical Engineering Program  
Professor of Optics and Senior Scientist at the Laboratory for Laser Energetics  
University of Rochester, Rochester NY 14627

## **Education**

Faculté Polytechnique de Mons, Belgium Engineer's Degree, 1978 Electrical Engineering,  
Brown University, M.S. 1980, Engineering  
Stanford University, Ph.D. 1984, Applied Physics

## **Prior Employment**

IBM Post-Doctoral Fellow, 1983-1984  
Acting Assistant Professor of Electrical Engineering, Stanford University, 1983-84  
Assistant Professor of Electrical Engineering, Princeton University, 1984-1990  
Visiting Professor, Université de Paris, France, 1985

## **Five Recent Publications**

- (1) "Ordering And Self-Organization In Nanocrystalline Silicon," G. F. Grom et al., **Nature** Vol. 407, 358 (2000).
- (2) "Nanocrystalline Silicon Superlattices: Building Blocks For Quantum Devices," L. Tsybeskov et al., **Mat. Sci. & Eng. B** Vol. 69-70, 303 (2000) (Invited).
- (3) "Electronic States and Luminescence in Porous Silicon Quantum Dots: The Role of Oxygen," M.V. Wolkin et al., **Phys. Rev. Lett.** Vol 82, 197 (1999)
- (4) "Porous Silicon: From Luminescence to LEDs," R. T. Collins et al., **Physics Today**, Vol. 50, No. 1, 24, 1997 (Invited).
- (5) "Silicon-Based Visible Light-Emitting Devices Integrated Into Microelectronic Circuits," K. D. Hirschman et al., **Nature**, Vol. 384, 338, 1996.

## **List of Collaborators During the Past 48 Months**

S. Kurinec, L.F. Fuller, *Rochester Institute of Technology*; T. Blanton, A. Marchetti, *Eastman Kodak Co.*; G. McLendon, *Princeton University*; R. Hummel, *University of Florida*; H. Schwettman, *Stanford University*; R. Haglund and N.Tolk, *Vanderbilt University*; M. Jaros, *University of Newcastle, UK*; A.E. Dixon, *University of Waterloo*; R. Collins, *Colorado School of Mines*, E. Schiff, *Syracuse University*; D.J. Lockwood, *NRC Canada*; F. Koch, *Technical University of Munich*; C. Delerue, *University of Lille*; B. White Jr., *Motorola*; M. Zacharias, *University of Magdeburg*; N. Kalkhoran, *Spire Corp.*

## List of Ph.D. Students

I.H. Campbell (Ph.D., 1990), Staff Member at Los Alamos National Laboratory  
W.L. Nighan Jr. (Ph.D., 1990), Managing Director, Incubic  
T. Gong (Ph.D., 1991), Head Hunter  
B.C. Tousley (Ph.D., 1994), Department of Defense  
C. Peng (Ph.D., 1995), Staff Member, Intel Corp.  
Y. Kostoulas (Ph.D., 1995), Senior Applications Engineer, ADE Corp.  
Z. Xu (Ph.D., 1995), Staff Member, Advanced Materials  
A.I.Lobad (Ph.D., 1997), Staff Member, Phillips Air Force Base  
S.P. Duttagupta (Ph.D., 1997), Assistant Professor at Boise State University  
X. Weng (Ph.D., 1997), Post-Doctoral fellow, University of Rochester  
B. Ucer (Ph.D., 1998), Staff Member, Wake Forest University  
P. Rodney (Ph.D., 1998), Staff Member, Boeing, Los Angeles  
K. Hirschman (Ph.D., 2000), Assistant Professor at Rochester Institute of Technology  
S. Chan (Ph.D., 2000), Post-Doctoral Fellow, Center for Future Health, Univ. of Rochester  
M. Wolkin (Ph.D., 2000), Start-up company in California  
H. Ye (Ph.D., 2000), Staff Member, Lucent