



Hands-on Workshop in Biophotonics

ABOUT THE COURSE

This hands-on course will demonstrate to participants the application of Finite-Difference Time Domain (FDTD) method in biophotonics. Participants will have the opportunity to use state-of-the-art photonics simulation tools (Opti FDTD) and learn about their application in biophotonics problems.

WHO CAN BENEFIT?

Biotechnology professionals and managers seeking to expand their skills and company expertise into the rapidly developing area of biophotonics and medical diagnostics.

Researchers and instructors interested in the application of the FDTD method and simulations tools in the teaching of biophotonics.

Professionals, managers and decision-makers in the photonics industry looking to expand into the medical diagnostics and biotechnology fields.

COURSE CONTENT

- Introduction to optics and Maxwell's equations
- Introduction to the FDTD method
- Simulation of basic optical phenomena with FDTD
- Basic features of biological tissue optics
- Light scattering properties of biological cells
- Effects of cellular morphology on the light scattering patterns
- Bio-electromagnetic applications of the FDTD method
- Other optical methods in biological problems

ABOUT THE INSTRUCTOR

Dr. Stoyan Tanev has obtained his Ph.D. degree from Université Pierre et Marie Curie, France. Dr. Tanev has significant research and engineering experience in the field of linear and nonlinear optics, optical simulations and, in particular, the applications of the FDTD methods in Photonics and Biophotonics. He has worked at Optiwave Corporation and Innovance Networks. Dr. Tanev has initiated the research and the development of the OptiFDTD which is now being acknowledged as one of the most powerful time domain Photonics simulation tools worldwide.

WHEN? March 5 & 6, 2003, 8:30 – 4:30

WHERE?

March 5th
(theory) National Research Council
1200 Montreal Road
Building M-50, Room 115
Ottawa, Ontario K1A 0R6

March 6th
(lab) Optiwave Corporation (Training Facility)
7 Capella Court
Ottawa, Ontario K2E 7X1

COST

- ✓ \$995.00 CDN + GST
- ✓ Lunch & Parking Included
- ✓ 15% Discount for more than one (1) person from the same organization
- ✓ 15% for researchers, faculty members and students

REGISTRATION

Please fill the reverse side of this pamphlet and fax it to **613-746-6653** or call **613-746-3595**, ext 221



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