



**NaNoNetworking Center in Catalunya**  
 Mòdul D6 (Campus Nord)  
 Jordi Girona, 1-3  
 08034 Barcelona  
 Catalunya, Spain

## Second NaNoNetworking Day

### June 23, 2010

### Universitat Politècnica de Catalunya (UPC)

### Barcelona, Spain

Date: Wednesday, June 23, 2010		
Location: Campus Nord of the UPC – Sala d'Actes (Edifici Vèrtex)		
8:30-9:00		Registration
9:00-9:30	Ana Isabel Pérez Neira Research Vicedean of UPC Elisa Sayrol Dean of Telecom BCN	Welcome/Opening
9:30-10:00	Ian F. Akyildiz Georgia Tech & UPC & N3Cat	Keynote Speech: NanoCommunications: an Overview
10:00-11:00		Coffee Break + Poster Session
	SESSION 1: Chair: Eduard Alarcón	NANO-DEVICES and APPLICATIONS
11:00-11:30	Stephan Roche Institut Nanosciences et Cryogénie	Bridging Nanoelectronics with Chemistry: Strategies and Challenges
11:30-12:00	Sorin Cotofana TU Delft	Single Electron Tunneling Device-based Computation
12:00-12:30	Antoni Bayés-Genís & Carolina Soler Germans Trias i Pujol Hospital	Cardiac Regeneration: Cardiomyocyte Culture and Stem-Cells Co-culture
12:30-12:45	Sema Oktug Istanbul Technical University	A Defect Tolerance Mechanism for Self-Assembled Nanonetworks
12:45-15:00		Lunch + Poster Session
	SESSION 2: Chair: Albert Cabellos	NANOCOMMUNICATIONS
15:00-15:30	Jian-Qin Liu NICT Kobe Advanced ICT Research Center	Signal Pathway as Networked Controller: Exploring Moleware Dynamics for Nanonetworks
15:30-16:00	Sasitharan Balasubramaniam Waterford Institute of Technology	Protocols for Synthetic Nano Communication Devices
16:00-16:30	Özgür Akan Middle East Technical University	Mobile Ad Hoc Molecular Nanonetworks
16:30-17:00	Tuna Tugcu Bogazici University	Energy Model for Communication via Diffusion
17:00	Ian F. Akyildiz Georgia Tech & UPC & N3Cat	Concluding Remarks
20:30		St. Joan DINNER and PARTY



Poster Session (during breaks)	
Josep Miquel Jornet Montaña Georgia Tech & N3Cat	Ultra-broad-band Communications for Future Electromagnetic Nanonetworks in the THz Band
Ignacio Llatser Martí UPC & N3Cat	Scalability of the Channel Capacity of Electromagnetic Nanonetworks
Massimiliano Pierobon Georgia Tech & N3Cat	Noise Characterization of Diffusion-based Molecular Communication in Nanonetworks
Luis Carlos Cobo Rus Georgia Tech & N3Cat	Flagellated Bacteria-based Nanonetworks
Sergi Abadal Cavallé Georgia Tech & N3Cat	Automata Modeling of Quorum Sensing for Nanocommunication Networks
Nora Garralda & Iñaki Pascual UPC & N3Cat	NanoSim: A Simulation Framework for Diffusion-based Molecular Communication