INTEGRATED NANODEVICES

"NANODEV"

www.nanodev.mnt.metu.edu.tr

The primary objective of this project was to extend the already formed synergy and working spirit among the international and interdisciplinary group of research teams that was formed throughout the NANOBIOSENS project (PIRSES-GA-2008-230802) with different expertise areas to the next level of carrying the innovated skills and knowledge to a more advanced area of application. With the addition of two new structures into the proposed project, which are GÜNAM; Center for Solar Energy Research and Applications in METU-TURKEY and Central China Normal University-CHINA, it had been possible to develop nanomaterials with modified properties along with improved selectivities for their exact purposes in fields of biosensors/bioelectronics and solar energy. NANODEV project aimed to successfully assemble individual pieces of elements, such as different nanomaterials, biological compounds, and transducers into each other in order to study the role of nanomaterials in the assembled piece of work.

In the NANODEV project, there are six participants from six countries with different expertise areas in the field of chemical engineering, biomedical engineering, materials science, physics, chemistry, and biology. The international and interdisciplinary group of research team who came together is composed of Turkey, France, Ukraine, Canada, United States and China. These groups are shown in the Table below. Different pieces of work can thus be constructed into each other to first of all study their "separate" roles in that assembled piece of work. The total duration of the project was 36 months.

LIST OF PARTNER ORGANISATIONS

Partner name	Short name	Local Coordinator	Country
Middle East Technical University	METU	Assoc. Prof. Burcu AKATA KURÇ	TR
Université Claude Bernard Lyon 1	UCBL	Prof. Nicole JAFFREZIC-RENAULT	FR
Institute of Molecular Biology and Genetics of National Academy of Sciences	IMBG	Prof. Sergei DZYADEVYCH	UA
Texas Tech University	TTU	Prof. Albert SACCO Jr.	USA
McGill University	MGU	Prof. Maryam TABRIZIAN	CA
Central China Normal University	HNU	Prof. Aidong ZHANG	CHI

Several objectives of the project, along with the representative pictures from the results obtained are shown below:

NANOMAT	*Synthesis* and *Integration* of all types of nanomaterials in their as-synthesized and modified forms
NANODEV	NANODEV deals with the formation of an actual miniaturized device out of the integrated parts .
APPLICATIONS	APPLICATIONS is where all materials developed and characterized are tested in real (or as close as real) applications.