

Short presentation of an expertise profile for the 5th call Space in FP7

AMG Technology Ltd.

type of organisation: SME

Country: Bulgaria



COSMOS Matchmaking Event
18th March 2011, Sofia, Bulgaria

Draft Call Topics that we are interested in

Space-based applications at the service of European Society (GMES)

➤ *Pre-operational validation of GMES services and products*

➤ Support to emergency response management



➤ *Support to the coordinated provision of observation data*

➤ Research and development for In-situ component



Strengthening the foundations of Space science and technology (SSF)

➤ *Research to support space transportation and key technologies*

➤ Key technologies for in-space activities



Cross-cutting activities

➤ *SME specific research*

➤ Bringing terrestrial SME research into the space domain



Presentation of AMG Technology Ltd.

➤ Structure of the organisation

- BG SME active in semiconductor and MEMS technologies
- Staff: 8 pers.
- Owns fully equipped prototyping fab: from raw materials to packaging and testing

➤ Short history of the organisation

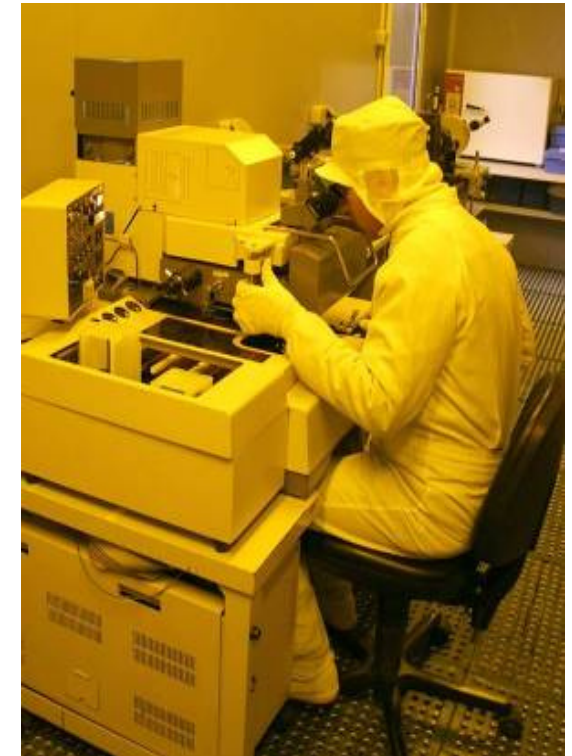
- Founded in 2007, focussed on development of original prototyping and manufacturing MEMS technologies
- Company team has strong experience in CMOS manufacturing and MEMS (since 1998)
- Skills in MEMS design and functional integration

➤ Experience with the EU Framework Programme

FP6 Project 026622/2006 „HYDROMEL“ (subcontractor)

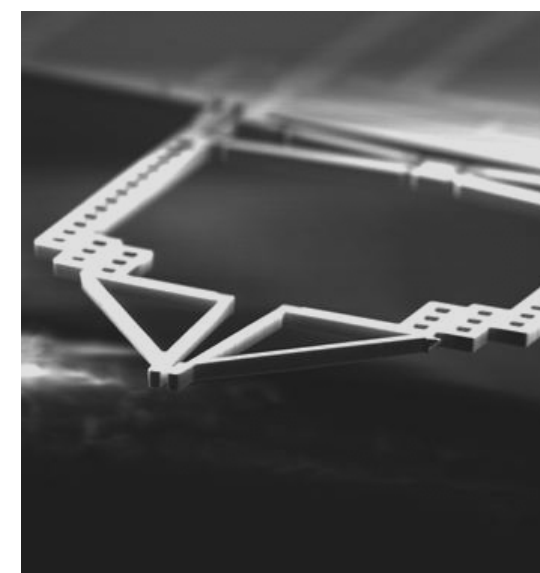
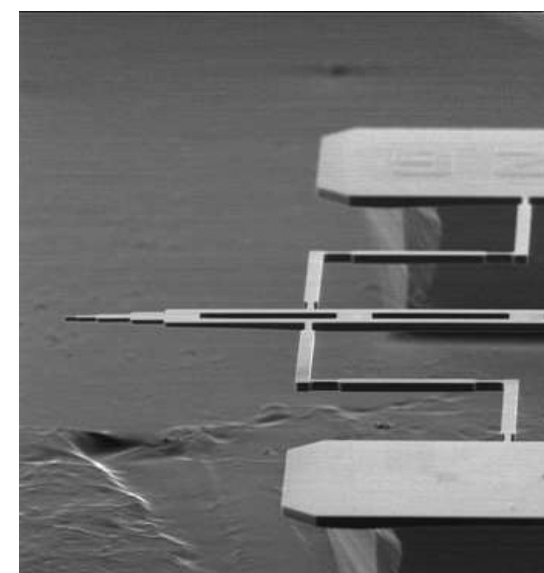
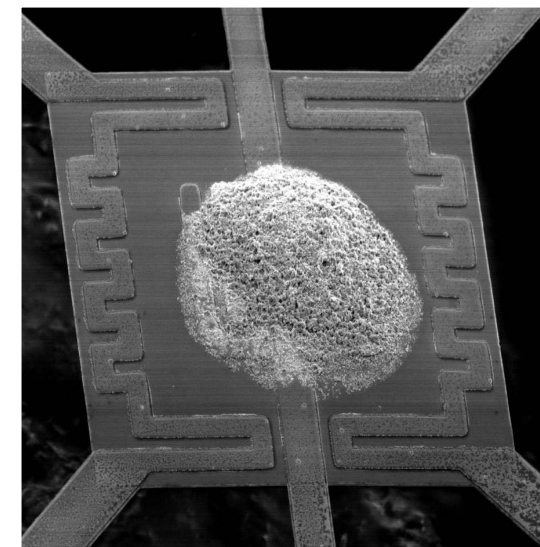
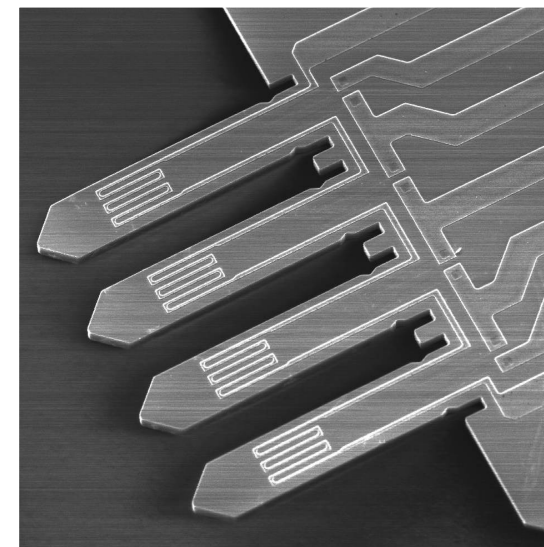
FP7-SME-2011, BSG-SME Research for SMEs, proposal 286146 (partner)

510581-LLP-1-2010-GR-LEONARDO-LMP (partner)



Competencies

- List of competencies on the basis of the recent work programme Space
 - all-in-house MEMS development and prototyping;
 - design and prototyping of MEMS sensors for in-situ monitoring with improved sensitivity and resolution, revealing high robustness and reliability;
 - development and prototyping of application specific micromechanical components and systems with integrated functionality, having low power consumption dedicated for both: space-based and non-space applications;
- Reference projects
 - e-NOSE(NTS), NIF №1NIF-02-20/24.10.2005,
 - MHP Devices, NIF, № 5NIF – 02-249/28.12.2008,
 - Robot systems and mechatronic devices for Nanotechnology, NSF № TK 171/08
 - FP6 Project 026622/2006 „HYDROMEL“
 - 510581-LLP-1-2010-GR-LEONARDO-LMP



Intended Role in a Consortium

➤ Partner

Space-based applications at the service of European Society (GMES)

- ***Pre-operational validation of GMES services and products***
 - Support to emergency response management
Providing complimentary data for improving performance of emergency management
- ***Support to the coordinated provision of observation data***
 - Research and development for In-situ component
Development of novel *in-situ* sensors with significantly improved resolution and sensitivity

Strengthening the foundations of Space science and technology (SSF)

- ***Research to support space transportation and key technologies***
 - Key technologies for in-space activities
Development of novel integrated micromechanical components with sensors' and actuators' functionalities, having dramatically reduced weight, footprint and power consumption

Cross-cutting activities

- ***SME specific research***
 - Bringing terrestrial SME research into the space domain
Re-design and prototyping of non-space measurement and analytical systems for space based applications

Contact and further information

➤ Address data of the person to contact:

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➤ Relevant links / references:

1. www.amg-t.com

2. Stavrov V, Vitanov P, Tomerov E, Goranova E, Stavreva G, Novel piezoresistive e-NOSE sensor array cell, Proceedings of the International 4M2007 Conference, Borovetz, Bulgaria, October 2007, Dimov S, Menz W and Toshev Y (Eds.), Whittles Publishing Ltd., pp. 347-349.

3 V. Stavrov, E.Tomerov, G. Stavreva, C. Hardalov, A. Shulev, Lateral Displacement MEMS Sensor, Proc. Eurosensors XXIV, September 5-8, 2010, Linz, Austria