

PROJECTS & COLLABORATIONS

Members of the staff have participated to several projects funded by EU (e.g., NORMAH, DMU-FS, CUSTOM-FIT), National Research Ministry (e.g., V-CLOTH and DESPRO - DDesign PROsthesis), Private institutions and Industry.

RUNNING PROJECTS

I4BIO3 – Innovation for Bioengineering

Artificial prosthesis design

Co-funded by Fondazione Cariplo (Intesa Bank)

Development of methods and tool to manage and enhance Intellectual property to improve competitiveness of SMEs

Funded by Chamber of Commerce of Bergamo

Virtual Ergonomics & Motion Capture systems for industrial applications

Funded by private companies

Development of innovative solutions for industrial products and IPR management

Funded by private companies

BODY-SCAN – Clothing Design and Simulation

Co-funded by MISE (Italian Ministry of Economic Development)

INDUSTRIAL COLLABORATIONS

The research group strongly co-operates with National and European companies and academics institutions. Some running collaborations are:

- ABB SACE and ABB, Italy
- AIM, France
- C3M, Slovenia
- COSTER, Italy
- EPTA Engineering, Italy
- GDM, Italy
- LMS International, Belgium
- Politecnico di Milano, Italy
- ST Microelectronics, Italy
- Tecos, Slovenia
- Tenacta Group, Italy

VIRTUALIZATION & KNOWLEDGE



EXPANDING THE INNOVATION



Contact:
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LOCATION

V&K Group is a research group of the Department of Engineering, University of Bergamo. The research group has its own laboratories (both software and experimental) at the Engineering Campus, in Dalmine (BG), about 10 km from Bergamo and 5 km from Kilometro Rosso.

MISSION

The mission of the group is to gather different competences/skills and develop and/or integrate new methodologies and ICT tools to support technological innovation and intellectual property management. New solutions for industrial applications and innovative methods, tools and prototypes to support product development are investigated or developed in collaboration with industrial partners within the framework of national and international projects. The staff is also involved in courses for mechanical and management engineering.

STAFF

Group Coordinator

Caterina Rizzi – Full professor

Researchers

Daniele Regazzoni
Davide Russo

PhD Students

Roberto Morotti
Andrea Vitali
Stefano Duci
Giordano De Vecchi

Research Assistants

Marco Serafini
Christian Spreafico
Tiziano Montecchi
Giancarlo Facoetti

Fellows

Paolo Carrara
Santosh Khawale

Research activities concern following areas:



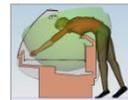
VIRTUAL PROTOTYPING



PHYSICS-BASED MODELLING AND SIMULATION



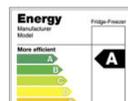
VIRTUAL PROSTHESIS DESIGN & TEST



HUMAN MODELLING & VIRTUAL ERGONOMICS



ENGINEERING KNOWLEDGE MANAGEMENT



ECO-DESIGN



SYSTEMATIC INNOVATION



INTELLECTUAL PROPERTY MANAGEMENT



TECHNOLOGY FORECASTING

Research activities are carried out in collaboration with industrial partners under the aegis of National or European projects or direct contract with companies.

HARDWARE



8 PC WORKSTATIONS
RAPID PROTOTYPING MACHINE - Z-CORP Z510



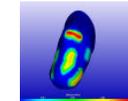
HAPTIC DEVICE – NOVINT FALCON
EEG DEVICE – EPOC



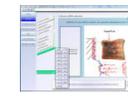
MOTION CAPTURE DEVICES
MOTION SENSING TECHNOLOGY FOR HUMAN–COMPUTER INTERACTION

SOFTWARE PACKAGE

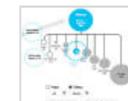
DEVELOPED IN HOUSE



SMA - SOCKET MODELLING ASSISTANT
A knowledge based system for 3D socket modelling

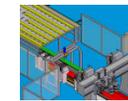


BOB-UP - SYSTEMATIC INNOVATION TOOLS
Computer assisted problem analysis

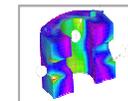


KOM - PATENTS DB & SEARCH ENGINE
Knowledge organization from Patents database

COMMERCIAL PACKAGES



3D CAD SYSTEMS
SolidEdge, SolidWorks, NX suite, Rhino Ceros



CAE SYSTEMS
Abaqus, Comsol multiphysics, Algor



DIGITAL HUMAN MODELERS
Jack and LifeModeller



SYSTEMATIC INNOVATION TOOLS
PATENTS DATABASE & DOWNLOADER
Goldfire Innovator and Creax