



#### **EuCARD-2 WP-2 Status**

Steering Committee Meeting Malta, 26.04.2016





### Progress since 2015

- A combined (WP2 and WP11) industry workshop on applications of thermal management materials was organized in November 2015, followed by a company visits
- Based on a survey; the prioritisation of requirements for applications outside High Energy Physics is:
  - Maximize thermal conductivity
  - Minimize thermal expansion coefficient
  - Low density
  - High operational temperature
  - Ensure machining/size/tolerances
  - Good chemical and oxidation resistance
  - Maximize electrical conductivity
  - Friction and wear properties



# Milestones and Deliverables due up to M36

 EuCARD<sup>2</sup> WP2 has 2 deliverables (reports) and 3 milestones (EuCARD<sup>2</sup> meets industry events)

Report no. (D/M)	Title	Due date	Status
D2.1	EuCARD-2 Key Technology Areas	M12, achieved	edms.cern.ch/docum ent/1325115/4
MS13	Compact Accelerators for Isotope Production	M18, achieved M23 (justified)	indico.cern.ch/event/ 366464
MS14	Thermal Management Materials for Industry	M30, achieved M31 (justified)	indico.cern.ch/event/ 400452
MS15	To be decided	M42	To be prepared
D2.2	Final work package report	M44	To be prepared



## **EUCARD**<sup>2</sup> Summary on communication

Title of event	Date	Location	Particip.	Link
<b>Advanced Materials</b> and Surfaces	19-20.11. 2013	CERN, Geneva, CH	100	indico.cern.ch/ event/229108
Accelerators for ADS	20-21.3. 2014	CERN, Geneva, CH	50	indico.cern.ch/ event/300409
Hannover Messe	7-11.4. 2014	Hannover, DE	10000+	cds.cern.ch/rec ord/1709754
EnEfficient RF Source Workshop	3-4.6. 2014	STFC, Daresbury, UK	70	indico.cern.ch/ event/297025
SEMI-THERM	15-19.3.2015	San Jose, US	200	semi-therm.org
Comp. Accel. for Isotope Production	26-27.3. 2015	STFC, Daresbury, UK	70	indico.cern.ch/ event/366464
Appl. of Particle Accel. in Europe	18-19.6. 2015	London, UK	80	indico.cern.ch/ event/377384
Appl. Thermal Management Mat.	6.11.2015	CERN, Geneva, CH	80	indico.cern.ch/ event/400452



- Continue liaison with industry
  - Meetings with industry for collaboration/technology transfer are planned as a result of the workshop with industry on the applications of thermal management materials
- Organize the 3<sup>rd</sup> and final workshop with industry M42
  - Further scouting, attendance at the workshops, planning and liaison with WP leaders regarding the decision on and organization of the 3<sup>rd</sup> workshop with industry
- Continue liaison with Technology Transfer offices of the EuCARD-2 participants for the promotion of the 3<sup>rd</sup> workshop with industry



### Open issues

- EuCARD-2 meets Industry event #3
- to be organised jointly between WP2 (STFC and CERN) and other WP around month 42 (Nov. 16) of the EuCARD-2 project
- Planned workshop / 3 choices:

Title of event	Date	Venue	WP
High Efficiency Klystrons	Summer 2017?	?	3/12/2
Low energy electron beams for industrial and environmental applications	Early Dec. 2016	Warsaw, Dresden Huddersfield Oxford or Daresbury CERN, Geneva	4/2
Advanced Low Emittance Ring Technology	16 Sept. 16	Elettra, Trieste	6/2