September 28, 2016
Hitachi Metals, Ltd.

Corporate Research Lab to be Established

Hitachi Metals, Ltd. (hereinafter, "the Company"), will establish a Corporate Research Lab (hereinafter, "CRL") in April 2017 in order to undertake medium- to long-term R&D on advanced materials that contributes both to sustained growth and to society. The Company then plans to erect a new building in Kumagaya, Saitama Prefecture and consolidate the CRL's functions there in April 2018. The new building will house the Production System Laboratory and the Magnetic Materials Research Laboratory as well as the CRL, and it will have in place an R&D system that integrates advanced materials technology with process technology. The CRL will post personnel overseas as well, and seek closer collaboration with research institutions inside and outside Japan in pursuit of global R&D.

The Company has been expanding its business operations to support sustained social development by developing high quality products in harmony with the environment and otherwise utilizing advanced materials technology, especially in the social infrastructure, automotive, and electronics sectors. Its business domains have rapidly expanded on a global scale in recent years, pushing the overseas sales ratio up to 56% (as of FY2015).

To take on its global competition, the Company is also striving to ensure that business expansion is accompanied by improved profitability, making materials/process R&D focused on medium- to long-term trends in science & technology and in markets all the more important. There is also a growing need to enhance R&D functions to buttress global business expansion.

Given this context, the Company is pressing on with R&D reform in its FY2018 Medium-Term Management Plan in order to make itself a genuinely development-oriented company. The first step in this is the establishment of the CRL in Japan to address medium- to long-term topics. The CRL will take up medium- to long-term research topics in material technologies/products chosen with both threats and opportunities in mind, working to create new businesses that will take the Company into the next generation. It will actively pursue open innovation so that it can quickly and efficiently offer the outcomes of its R&D to the public. In addition to strengthening its development network with overseas research institutions as an organization charged with globally extending R&D, the CRL will consider setting up R&D locations in Europe and the US.

The Company is committed to keeping a close eye on scientific and technological progress and on social trends, and to helping develop the society of the future by conducting advanced materials R&D from a medium- to long-term perspective.

1. Profile of Corporate Research Lab
   (1) Areas of focus
      ① New business creation in view of threats and opportunities
      ② Composite materials
      ③ Materials/components for social infrastructure (automobiles, railways, aircraft, energy)
   (2) Personnel: about 250 globally (anticipated staff level in 2025, inclusive of other organizations housed in the same facility)
   (3) New building
      ④ Location: Kumagaya, Saitama Prefecture (on premises of Kumagaya Works)
      ⑤ Completion date: March 2018

2. Concept of Corporate Research Lab
   (1) Opening the way to a future of sustained growth via advanced materials/processes
   The CRL will incorporate MI*, AI and other methods to lead the world in cutting-edge materials/processes. The new building will provide work spaces shared with outside research institutions and an open laboratory to promote open innovation, and numerous opportunities for lectures by renowned outside researchers and for in-house briefings will be arranged to promote the development of advanced technology through vigorous discussions.
   *MI: Material Informatics - a scientific approach of utilizing computer science and huge volumes of data on the physical/chemical qualities of substances/materials to resolve various problems in substance/material science
   (2) Helping human resources grow
   The CRL will co-locate laboratories and work areas to improve the efficiency of R&D, and will promote personnel exchange. It will refine and foster the logic skills of young researchers by emphasizing exchange and discussions between highly capable technicians in an open venue.
   (3) Enhancing Hitachi Metals' technology base
   The CRL will serve as a venue symbolizing the Company's technology as the Company works to become a genuinely development-oriented enterprise. It will also set up an exhibition zone for Company products to deepen dialogue with customers. The CRL will bolster its development network with research institutions inside and outside Japan, and pursue global expansion of the Company's R&D.

<Reference> Medium- and Long-term Topics in View of Threats/Opportunities (Examples)

	Current products	Development topics for presumed threats/opportunities
Metal materials	Die materials	Additive fabrication
	Aerospace/energy (super alloys)	Composite materials
Magnetic materials	Rare-earth magnets	New magnets
Functional materials	Cast iron	Composite materials/multi-materials
Cable materials	Copper cables	Aluminum/composite conductors

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