

5. Host Institution's Commitment (in English)

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To MEXT

National Institute for Materials Science (NIMS)

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I confirm that the measures listed below will be taken faithfully regarding "International Center for Materials Nanoarchitectonics" adopted under the World Premier International Research Center Initiative.

<Provision in host institution's mid-to-long-term plan>

- Describe clearly the host institution's mid-to-long-term strategy plan and how the center is positioned within that strategy.

Looking from NIMS's point of view, the center is designed as an organization undertaking the two following roles, classified roughly: (1) an advanced research organization to conduct basic research for materials, fusing fields of materials science, chemistry and physics; (2) an organization to foster researchers who will create the future of materials research in an international and interdisciplinary atmosphere.

The objective related to (1) is the "development of innovative materials to realize a sustainable society", and this is consistent with the midterm objectives and midterm plan of NIMS. Accordingly, the center can be positioned as an organization which will play a principal role to lead the main body of NIMS by carrying out research in a radically accelerated manner. On the other hand, to put (2), the fostering of researchers, as the other pillar of the concept is a very important point of the center, from the standpoint of NIMS. The center is also positioned as a place to foster world-class young scientists and to supply tenured researchers to NIMS.

Therefore, the center is definitely incorporated into long-term strategies of the main body of NIMS in both aspects of research initiatives and supply of human resources.

<Concrete Measures>

- Describe the concrete measures that the host institution will take to satisfy the following requirements.

(1) How it will support the center's need to secure resources that match or exceed the project grant through such means as competitive grants obtained by researchers participating in the project, in-kind contributions and other forms of assistance by the host institution (including partial payment of salaries, provision of research space), and/or external donations.

NIMS will support the center in the following manner.

- i) Personnel expenses of some NIMS permanent staff (such as researchers with tenure and clerical staff) and some non-permanent staff who join the center will be allocated from operational subsidies and other funds of NIMS.
- ii) As for projects with operational subsidies that are handled by researchers who join the center from NIMS as principal investigators, we will allocate the research funds for those projects to the center to implement the project at the center. Among competitive grants obtained by researchers who join the center from NIMS, we will allocate an amount equivalent to the direct costs to the center, if the research plan is consistent with that of the center.
- iii) Part of operating expenses necessary for center's activities such as purchasing of new equipment, exploratory research funding, operation of common facilities, funding satellite institutions, scientist exchanges, holding symposia and outreach activities will be allocated from NIMS operational subsidies.
- iv) We will secure sufficient space mainly at the MANA Building in the Namiki Site.

v) Other than the above, we will give additional assistance for budgeting and space as needs arise.

(2) How it will institute a system under which the center's director is able to make substantive personnel and budget allocation decisions necessary to implementing the center project—a system, which in practice, allows the center director autonomy in making decisions regarding the center's operation.

The center director is given the authority for the center's general operation by the president of NIMS. In other words, the center director has the authority to recommend employment, renewal of contracts, determination of research expenses, and allocation of space for researchers who are invited to the center, except for NIMS permanent staff. His authority also includes employment and renewal of contracts of administrative staff members, except for NIMS permanent staff.

(3) The support it will provide to the center director in coordinating with other departments within the host institution when recruiting researchers for the center, while giving reasonable regard to the educational and research activities of those departments.

NIMS personnel are allowed to move to the center if the center director requests and he/she accepts the request and the NIMS president confirms its necessity. As stated above, the center will play a role to supply young staff researchers with tenure to the main body of NIMS. Conversely, necessary human resources can be supplied to the center from the main body of NIMS. We believe such mobility of human resources between the center and the main body of NIMS will stimulate both organizations.

(4) Its flexibility in applying, revising, or supplementing the host institution's internal systems as needed for the center to effectively implement new management methods (e.g., English-language environment, merit-based pay, top-down decision making) unfettered by conventional modes of operation.

We have already experienced in pioneering operations of English use as the official language, clerical work support system in English, creation of bilingual clerical documents, annual salary system, researcher's performance evaluation, salary assessment, renewal of contracts, etc. at the International Center for Young Scientists (ICYS). Such a flexible and distinctive management style can be adopted to the center as an extension of the above operations experienced. Furthermore, we are planning to actively adopt the center's successful management systems to the main body of NIMS.

(5) Its accommodation of the center's infrastructural requirements (for facilities, e.g., laboratory space; equipment; land, etc.).

For the research activities at the center, we will provide a space, approximately 10,000 m² for research, mainly at the MANA Building in the Namiki Site. The space will be used to secure the following:

Space for experimentation:

We will provide offices and laboratories at the MANA Building for young researchers such as post-doctoral fellows who will proceed with their research independently (about 4,000 m² in total). We will provide approximately 1/2 span as their laboratories. We will provide necessary and sufficient space to principal investigators invited from external organizations.

Single-occupied office and cafeteria:

We will provide young researchers with a single-occupied office (approx. 12 m²) where they can devote themselves to research and to live in a comfortable environment. Also, to realize an ideal Melting Pot environment, we will put all the offices together in one place, and secure enough space for discussions, including a cafeteria. At the center, we will utilize single-occupied offices which are currently used by ICYS.

We will allow researchers at the center to freely use research equipment and facilities such as Nano Foundry that NIMS possesses, and will make an effort to accommodate their needs for the use

as a priority. Furthermore, we will secure world's top-level advanced facilities with high commonality, in cooperation with the center in a well-planned manner.

(6) Other types of assistance it will provide to give maximum support to the center in achieving its concepts and objectives and becoming a world premier international research center in both name and deed.

We assume that the center project is extremely effective in activating the whole of NIMS, so we are willing to make efforts for the smooth implementation to the fullest. NIMS is expecting that the center will play a principle role in leading the main body of NIMS. However, this does not mean that NIMS intends to exploit the center to solve NIMS's specific issues such as the aging researcher population. Such problems should be, of course, solved through NIMS's own efforts. Actually, NIMS is expecting the center to play just two roles, i) leading of the main body of NIMS by carrying out research on nanotechnology and materials science in a radically accelerated manner and ii) fostering researchers who will create the future of materials research in an international and interdisciplinary atmosphere and providing them as NIMS's future research leaders with establishment of NIMS's tenure-track system.