

Research Grant Management Guidelines

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Chapter 1 General Provisions

Article 1 (Purpose) The purpose of these guidelines is to set forth the detailed provisions that are separately set forth from the Research Administration Regulations and the Rules for the Implementation of the Research Administration Regulations of Pohang University of Science and Technology (hereinafter referred to as "POSTECH"), thereby enhancing the efficiency of research.

Article 2 (Application) The management regulations of institutions that provide research grants shall be applied with a priority to research and outsourced assignments performed by POSTECH. In the absence of specific regulations, the research grant shall be managed in accordance with these guidelines.

Chapter 2 Research Management

Article 3 (Research Grant Management) ① In the case of fund management, the research grant shall be managed in accordance with the following categories, except the specific cases determined by the research grant provider:

1. Academia-industry general accounting: Government organizations (including subsidies), local autonomous entity's assignment
2. Academia-industry revenue accounting: POSCO, industrial entity, other assignments (foreign currency research grant, etc.)
3. Research overhead cost accounting: Research grant O/H, research promotion cost (such as an application for intellectual property rights and its registration costs)

② In the absence of specific account set-up requests from the provider, the representative account of the POSTECH Research and Business Development Foundation shall be used in accordance with the nature of the accounted funds. Any matters related to opening or closing accounts shall be managed exclusively by the accounting department.

Article 4 (Prior Review of Research Plan) ① The principal researcher shall enter a research plan into a system before submitting the research plan of the assigned project to the research grant provider and shall undergo a prior review of the adequacy of research grant through the department in charge of the overall sponsored research management.

② The department in charge of the overall sponsored research management shall notify a result of the research plan review to the researcher and request that the research plan to be revised and supplemented, if the research plan does not comply with the POSTECH's and the provider's standards.

③ All assigned projects that require POSTECH's resources (such as establishing an organization, providing POSTECH subsidies, supporting manpower and spaces, and applying overhead costs to an exceptional case) shall be determined whether to be applied through the prior examination of the relevant committee (department) prior to the submission of the research plan. However, each

of the followings shall not provide the POSTECH's resources:

1. The advance pre-checklist has not been submitted 20 days prior to the submission of the project plan or has been obtained after the submission, despite the need of POSTECH resources.
2. The contents of use plan for POSTECH resource are not true from the fact.
- ④ The head of the research management department shall further to improve the quality of research plan, and may support the advanced planning budget to promote the winning of a contract for a large-scale government research and development project as follows in order to contribute to the stability of research grant income and research vitalization by securing a long-term, large-scale research project-oriented research grant structural integrity.
 1. Candidates: Group research project of academic department or division (including interdisciplinary programs) in which five or more tenured faculty members from their department participate in
 2. Submission date: at the time of planning the main plan following the selection of the first draft of research plan (if needed, the project shall be supported at the first draft stage)
 3. Amount to be supported: the amount of aid shall be set within an adequate level based on the type and scale of the government research and development project
 4. Aid method: the budget shall be executed within the supporting period, and the evidential documents shall be submitted to the managing department after the supporting period.

Chapter 3 Research Project Agreement

Article 5 (Nature of Research Plan) ① The research plan shall be a proposal to secure a project, and is a means of securing the funds needed for the research. Therefore, externally, it shall act as a kind of a product and be used as an ancillary document to be attached to a contract (confirmed contract provisions) at the time of making the contract.

② During the research or after completion of research, if there are disputes for the research results, the research plan shall be served as basic reference for solving a problem.

③ The research plan shall be served as reference for selection and evaluation of research projects, and as a guideline for a research for researchers.

Article 6 (How to Prepare a Research Plan) ① The research plan shall be prepared with providing detailed descriptions, clear delivery of messages, easy to understand materials, and persuasive expressions.

② The research plan shall be prepared in an accurate manner followed by various application forms of commissioning institutions.

③ The research plan shall be prepared with the consideration of appropriateness of the budget allocation needed for research.

Article 7 (Allocation of Research Grant) When applying for a project, the research grant shall be allocated as follows:

1. Overhead costs (O/H): In case of separate determination by the supporting institution, the evaluation criteria shall be reflected to the greatest extent possible, and POSTECH's criteria shall be applied for other criteria not in the institutions' criteria.
2. Labor costs: The labor costs shall refer to the payment for internal and external researchers participating directly in the research and development project (the participation rate management shall be limited to the government research and development projects).
 - a. Internal labor costs
 - Tenured faculty: The unit cost (monthly salary) shall be calculated based on the lowest annual salary for each position as of the preceding year, but the announced labor costs from the preceding year shall be applied until the unit cost (monthly salary) is confirmed.

- Non-tenured faculty and researchers: The actual paid unit labor costs (monthly salary) shall be applied.
- b. External labor costs
 - Labor costs for researchers not affiliated with the participating research institution but are participating in the business of research and development (researchers from other organizations or student researchers from other universities)
- 3. Student labor costs: The labor costs paid to student researchers directly participating in the relevant research and development project (including post-doctorate researchers in accordance with Clause 3, Article 2 of the Enforcement Decree of the Basic Research Promotion and Technology Development Support Act).
- 4. Research equipment and materials costs
 - a. The devices and equipment whose purchase was completed two months prior to the final (stage) of the relevant research and development project that could be used in the relevant study (excluding personal computers unrelated to the implementation of research and development projects), ancillary expenses such as expenses related to the installation, purchase, lease, and use of the research facility (including the construction costs, land purchase and formation costs, in the case of projects whose aim is to create research infrastructures)
 - b. Purchase costs for reagents, materials, and computer processing and management fees
 - c. Costs for making prototypes, test products and testing equipment
- 5. Research activity expenses
 - a. Researcher's overseas business travel expenses
 - b. Manufacturing costs for printing, copying, film developing, and slide making, utility fees, taxes and charges, and fees directly related to the project.
 - c. Professional service fee, overseas and domestic education and training costs, book purchase expenses, convention hall costs, seminar holding costs, costs for participation in symposiums and seminars, manuscript fees, language interpretation fees, technology adoption fees, etc.
 - d. Fees for research and development services such as tests, analysis, inspections, clinical tests, technical information collections, and patent information researches.
 - e. In case of a detailed project, the expenses needed for the adjustment and management of the relevant research and development project.
- 6. Research project promotion expenses
 - a. Domestic business travel costs and transportation expenses of researchers
 - b. Office supplies expenses, purchase and maintenance costs for equipment and supplies to maintain the research environment
 - c. Business meeting expenses (conference hall costs and professional service fees under research activity expenses shall be excluded)
 - d. Meal expenses related to the performance of the relevant research and development project
- 7. Research allowance: Allowance for payment of rewards and incentives for principal researcher and participating researchers related to the relevant research and development project (to be appropriated within 20% of labor costs)
- 8. Commissioned research and development costs: The costs arising from commissioning a part of research to an outsourced institution (40% or less of the commissioned research and development costs)
- 9. Costs for applying for and granting intellectual property: All costs needed for applying for and granting intellectual property directly related to program implementation projects or costs necessary for technology transfer such as technology evaluation
- 10. Science and cultural activity costs: Costs related to expanding science, technology and culture such as science promotion material for the promotion of research projects, production of event programs, lectures, field activities, opening of research labs and nurturing PR experts
- 11. Research lab security costs: Costs for creating research lab security in relation to the relevant research and development project such as safety training fees, purchasing insurance, etc.

Article 8 (Application for projects and conclusion of contracts) ① The research project application (proposal) and contract (agreement) conclusion shall be implemented in the name of Executive Director, POSTECH Research and Business Development Foundation via the department in charge of the overall sponsored research management at the initiative of the principal researcher.

② The conclusion of the research contract shall be in accordance with the contents and forms set by each supporting institution. However, the provisions related to intellectual property must undergo prior review by POSTECH's intellectual property management department prior to conclusion of agreement.

Article 9 (Account assignment) ① When the contract for the research project is entered into, the department in charge of the overall sponsored research management shall manage the contract by assigning individual accounts for each principal of the research project specified in the research contract (agreement).

② Despite not specified in the contract (agreement), if the detailed assignments needs to be further distinguished for the efficient management of unit departments, it is also possible to set a joint account principal upon the prior approval of the research management overseeing department.

③ The account shall be confirmed as an eight-digit number that is automatically assigned by the system as follows in accordance with POSTECH's accounting standards.

1. POSTECH accounting: 2.xxxxxxxx
2. Accelerator department accounting: 3.xxxxxxxx
3. POSTECH Research and Business Development Foundation accounting: 4.xxxxxxxx

Chapter 4 Expenditure of research grant

Article 10 (Basic Principle for Research Grant) ① The research grant shall be implemented upon the confirmation of the budget by the sponsored research unit department at the initial actions and initiative of the account principal, and the final responsibility for the expenditure of research grant shall lie with the principal researcher.

② The item-by-item expenditure of research grant shall be based on the research plan. However, the expenditure of items unrelated to the implementation of the relevant research project shall not be allowed, and if not feasible, it shall be determined further by the department in charge of the overall sponsored research management.

③ When implementing the research grant, the head of the department in charge of the overall sponsored research management shall establish a system so that excessive amount increases, excessive appropriation, new establishment of expenditure items, expenditures not occurred during the research period, or expenditures for non-participating researchers will not occur without prior approval, and a manager shall be assigned to enhance the transparency and efficiency of implementation of research grant.

Article 11 (Research grant card) ① For the smooth implementation of a research project with the transparency enhancement of expenditure and management of research grant, the expenditures of all research grant shall in principle be through the use of research grant bank cards. Those items for which the use of bank cards is difficult may be processed in terms of wire transfer. Provided, however, that those items not subject to research grant bank cards shall be done through corporate bank cards. Personal bank cards shall not be accepted.

② In the event the research grant card is applicable, an application form for research grant card issuance shall be prepared after the conclusion of the research project contract (agreement) and submitted to the department in charge of the overall sponsored research management.

③ The person in charge of managing research grant cards shall be responsible for all the followings: applying for the research grant card issuance; submitting the application form; and distributing, managing, and settling the research grant cards.

Article 12 (Labor costs) If a researcher necessary for the relevant research is hired, the labor cost shall be paid within the labor costs budget out of research grant. The expenditure of labor cost shall be implemented by the approval from the relevant department by registering in advance the participating researcher in the system. Labor costs shall not be paid to non-participating researchers.

1. Researcher labor costs: The actual contract amount shall be paid as the allowance for a researcher (staff) to be paid after temporary employment for a period of time to carry out the research.
2. POSTECH student labor costs: Payment shall be made in accordance with POSTECH's labor costs payment standards for students at POSTECH (undergraduate, master's and doctoral students), and the maximum amount of payment shall not exceed the unit student labor cost standard for government research and development projects.
3. Temporary employment allowance: Allowance paid for temporary employment of external researchers to carry out the research (after concluding an employment contract with the principal researcher, then registering the outside participating researcher to the system).
4. Miscellaneous
 - a. The labor costs shall be managed in an integrated manner through the system so that the rate of participation does not exceed 100%. If it does exceed 100%, application to and participation in new projects may then be restricted (to be limited as government research and development projects).
 - b. Unit labor costs shall be calculated based on the contract unless otherwise set forth by the supporting institution. The unit labor costs of POSTECH's tenured faculty shall be separately calculated annually based on the faculty annual salary from the preceding year.

Article 13 (Purchase of goods) ① Requests for purchase means the process through which the current working department requests the contracting department to make purchases regardless of amount restrictions.

② The purchase approval process shall be as follows:

1. In the event of purchase activity, it must be approved for each financial resource at the point when approval is requested using the POVIS approval system.
2. In the event of the absence of the person with approval authority or if such person is unavailable for an extended period of time, the approval shall be commissioned in advance to the director of the relevant department (in charge of the academic department).
3. A PR or PO (purchase order), even in the event of an integrated budget, shall be approved by the relevant principal researcher.
4. The settlement criteria by stage are as follows:
 - a. Purchase request and Purchase order

Category	Approval request	Person with approval authority	Remark
Research grant	Person in charge of purchase	Principal researcher	Approval by principal researcher (approval by person in charge of academic department excluded)
School expenditure	Person in charge of purchase	Director of relevant department	

b. Inspection process

Category	Approval request	Person with approval authority	Remark
Research grant	Person in charge	Principal researcher	Determine whether equipment is

	of assets		satisfactory
School expenditure	Person in charge of assets	Director of relevant department	

c. Invoice processing

Category	Approval request	Person with approval authority	Remark
Research grant	Person in charge of purchase	Principal researcher	Approval by the director of the relevant department regardless of the source of funds (provided, the principal researcher may approve depending on department)
School expenditure	Person in charge of purchase	Director of relevant department	

③ The purchase request process shall be as follows:

1. The serial number for which the purchase request has been generated shall be generated after checking for any irregularities prior to generation, as the history is maintained even if they are deleted and processed for cause.
2. Since it is possible that two inspection approvals for one purchase request may occur in the event the purchase request is made for materials and costs (inspection approval and service entry approval after the warehousing of materials), it is recommended to make the purchase request by distinguishing the goods purchase and work details as much as possible.
3. When making a request for foreign capital purchase, the incidental expenses shall be based on 12.5%, and the daily foreign exchange rate shall be automatically provided by the fund management department.
4. All purchase requests shall be processed jointly with the POSBID system.
5. The scope and contracting method for purchase requests shall be as follows:
 - a. Scope of application: In case of purchase requests such as sale and purchase, manufacture, repair, lease, outsource service, construction, etc., the current working department shall make the purchase request without any limitation of amount.
 - b. Contracting method: Contracts shall be implemented by selecting methods favorable to POSTECH such as general bidding, restricted bidding, designated bidding and private contracts.

③ The purchase order process shall be as follows:

1. Settlement for small amount domestic and foreign capital purchases
 - a. Definition: The system under which goods below a certain price are ordered directly by the ordering department by selecting the vendor, bypassing the contracting department for delivery and payment.
 - b. Conditions for enforcement: In case of a quick purchase (Internet purchase, purchase through electronic commerce, etc.), or a local purchase is required, and the situation that the purchase requester has determined that a small amount purchase contract is necessary (excluding the construction contract).
 - c. Settlement amount: 3 million KRW per each domestic capital purchase (\$3,000.00 USD or less for foreign capital purchases).
- ※ Notes when processing small amount settlements (including bank cards).
 - Case of improper settlement: settlements such as installment payments for purchases, immediate accounting processing after purchasing goods, and construction settlement, shall be monitored and subject to warnings in a consecutive manner.
2. Settlement of research grant (corporate) bank cards
 - a. Definition: an order for purchasing 3 million won or less valued item by a research grant (corporate) bank card, the same as the amount for a small purchase order (the same criteria as for the small purchase system shall apply).
 - b. Criteria: If goods are purchased with the bank card, it shall in principle be processed after

generating the PO. However, an amount of less than 300,000 won (including VAT) may be processed for accounting immediately without generating a PO.

3. Settlement of unit price contracts

- a. Definition: The settlement system used when continuous management by unit price for a set period is favorable to POSTECH. It is a system for ordering and settling from the department in accordance with the unit price agreed upon by the contracting department without a separate contract from the ordering department.
- b. Procedure: If deemed necessary by the department, the contracting department implements a unit contract through a cooperation document or unit price purchase request, and the requesting department generates a unit price contract based on the implemented contract and settles without regard to amount limitation.

4. eNtoB purchase settlement

- a. Definition: Ordering various consumable materials such as MRO (Maintenance Repair and Operating), needed for school activities through the eNtoB system. It can be settled regardless of amount restrictions.
- b. Procedure
 - Login method: Access to eNtoB without an eNtoB ID by logging into the POVIS screen
 - General purchase and bank card settlement type may be selected depending on the payment method.
 - When paying by a bank card, the user personally makes the payment in the PG company's bank card settlement system.
- c. eNtoB new item registration: In the event the item purchased through eNtoB has unregistered material, if the purchase request is completed in the eNtoB screen, then the relevant information is delivered to the contracting department for the unregistered item. If the person in charge of purchase confirms and finishes the item registration after self-confirmation, the eNtoB purchase order is activated and the person in charge of the department may proceed with the subsequent work.
- d. eNtoB item settlement standard: In principle, the goods registered as eNtoB items shall be ordered using the system. However, even eNtoB-ordered items may be settled exceptionally using the small amount purchase order in the event of an emergency.
- e. Payment criteria for each purchase order form

Order Category	Amount limit per purchase	Transaction type	Processing method	Criteria for payment
Small amount foreign capital payment	\$3,000 USD or less	Direct transaction	PO generation	1. When quick purchase is necessary 2. When local (overseas) purchase must be made 3. When the purchase requester deems that a small amount purchase agreement is necessary. (excluding construction contracts)
Small amount domestic payment	3 million won or less	Tax invoice	PO generation	
Research grant/ Corporate bank card	3 million won or less	Bank card sales receipt	Processing (Less than 300,000 won) PO generation (300,000 won or more)	
Unit contract	No restriction	Tax invoice	PO generation	When settling goods subject to unit contract
eNtoB	No restriction	Bank card sale receipt	PO generation	When settling goods handled by eNtoB
		Tax invoice	PO generation	
Repair order	No restriction	Tax invoice	PO generation	When settling

				cooperation work order
RIST Test analysis fee	No restriction	Tax invoice	PO generation	Order generation limited to RIST test analysis fee
Radiation purchase	No restriction	Tax invoice	PO generation	Order generation limited to Ri (isotope) order

④ Miscellaneous

1. Any purchase of research equipment and materials that do not contribute to the relevant research project is not allowed, and if goods have been purchased close to the completion of research (including the case in which request for purchase was made one month prior to the completion of the relevant research and development project and goods have arrived after the completion of research), the prior approval of the department in charge of the overall sponsored research management is needed.
2. Of the research grant purchase equipment, the acquisition details of those equipment that are subject to common use as set forth in the government research and development project management regulation shall be registered in the government research and development project research equipment information network monthly after accounting settlement by the department in charge of asset management. (The equipment whose acquisition price is 30 million won or more, or equipment that can be used for common use even if less than 30 million won.)
3. A personal computer (a PC and a printer) with the purpose of the government research and development project shall in principle be purchased in accordance with the university's purchase process upon the pre-approval of Executive Director, POSTECH Research and Business Development Foundation, when the need for a computer is either not reflected in the related research plan or is additionally required. (Established January 1, 2015)

Article 14 (Travel expenses) ① Travel expenses shall be paid within the range of the budget reflected in the research plan (implementation budget) in accordance with the supporting institution's payment standards. However, if there are no regulations separately set forth by the supporting institution, it shall be paid in accordance with POSTECH's travel expense regulations (school expenditures).

② In the event of a domestic business trip using a privately-owned car, the highway tolls shall be reimbursed as an expense, and in the event of a business trip by two or more persons, transportation fees shall be paid only to the car owner.

③ For fees or other expenses that are incurred as a result of extended stays overseas or cancellation of an itinerary during an overseas business trip due to an act of god, or miscellaneous unavoidable reasons, additional payments may be made as travel expenses (lodging, meals, etc.) if relevant references are attached.

④ In the event a meeting is scheduled in advance during a business trip, the expenses for the meeting may be appropriated, in which case the business trip expenses must be applied for by excluding meal expenses. (Double payments of meal expenses and meeting expenses shall be prohibited.)

Article 15 (Professional hiring fee) ① The rank and qualification criteria for domestic and foreign professions shall be as follows:

Category	Qualification criteria		
	Academia	Research institution	Corporation
Class S	Head of institution, renowned personnel		
No. 1	Tenured faculty or higher	Senior researcher or higher	Professional experience of 10 years or more

No. 2	Those who do not fall into Class S and No. 1.
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② When hiring domestic and overseas professionals, those hiring departments shall obtain the principal researcher's approval.

③ The criteria for consultation fees (speaking honorariums) for invited professionals are as follows:

Category	Qualification criteria		
	Domestic professional	Overseas professional	Remark
Class S	500,000 won or less	An amount twice as much as for a domestic professional may be paid.	-
No. 1	250,000 won or less		
No. 2	150,000 won or less		

④ Unit price for manuscript fees and translation fees

Category	Calculation standard	Payment standard
Manuscript fee	One sheet of A4 paper (based on four sheets of 200-character sheet)	20,000 won or less
Translation fee	One sheet of A4 paper a. Korean → Foreign language b. Foreign language → Korean	a. 50,000 won or less b. 30,000 won or less

⑤ When paying for the costs of stay for an invited professional, POSTECH's travel expense regulation shall be applied. However, if used in Korea, the "domestic travel expense criteria" and if used overseas, the "overseas travel expense criteria" shall be applied.

⑥ Consultant fees for all invited professionals, including foreigners, shall be paid to the relevant party after the registration of the vendor in the system.

⑦ Funds shall be paid to the actual business partner in principle, and the consultation fees for foreigners shall be paid to the payee by foreign currency denominated wire transfer or after currency exchange.

Article 16 (Incentives) ① The matters for incentives to be incorporated in the budget shall be in accordance with the following:

1. The incentives for government research and development projects must be received jointly by the principal researcher and participating researchers within the budget range of the research allowance reflected in the research plan. For all payment candidates, the principal researcher shall pay through a separate contribution evaluation.
2. An industrial entity project may be appropriated for up to 20% of the total research grant at will, and in the event the overhead costs (O/H) is reflected by 20% or more, an additional appropriation is possible for the exceeding rate.
3. The POSCO projects shall be paid within 50% of professor labor costs reflected in the project.

② The application and payment method for incentives is as follows:

1. Payment period: After more than three months since the commencement of the research project
2. Payment return and rate: Principal researcher's discretion (supporting institution regulation has priority)
3. Payment procedure: Evaluation of level of contribution -> submission of payment application -> payment after consultation
4. Paying department/method: Payment through personnel and accounting system from the related academic department (research center/ university center).

Article 17 (Meeting expenses) ① In the event it is not separately determined by the supporting institution, meeting expenses for research may be paid, up to 15% for up to 20 million won of

research grant, and for the portion exceeding 20 million, within the total amount by applying 7%.

② In the event the meeting expenses related to the research project are used for meetings and for meals with participating researchers and external participating researchers, a prior internal approval request or minutes (including purpose of meeting, date and time of meeting, and matters discussed) shall be prepared and maintained, and actual expenses needed for the meeting shall be appropriated.

③ When meeting expenses are applied for during the weekends (holidays), if the meetings were properly held directly related to the relevant research project as evidenced by proof of meeting (a document bearing the time and date (weekend), and purpose of the meeting), then it may be paid by submitting the minutes of the meeting.

④ Meal expenses related to projects may only be used by the relevant research project participating researcher, and shall be used for meal expenses related to the research project (late night shifts or special shifts). However, in the event of usage over holidays or in remote areas far away from the research location, the reasons therefor and evidentiary documents shall be submitted.

⑤ Meeting expenses and meal expenses in other areas shall be payable if it is found that the meeting was directly related to the relevant research projects, based on the evidence that can prove the meeting took place.

⑥ In the event there is no standard set forth by the research grant supporting institution, the research meeting expense shall be 30,000 won per person, and the late shift meal expense shall be 30,000 won per person, in principle. (Established April 1, 2014)

Article 18 (Commissioned research and development fees) ① When joint (collaborative) research with external institutions is needed for the smooth performance of a research project, commissioned research and development fees may be incorporated in accordance with the research grant supporting institution's regulations. However, the commissioned research and development fees shall not exceed 40% of the sum of labor costs and direct costs, in principle.

② Commissioned research and development fees shall be managed through the contract (agreement) between the research management overseeing department and an external institution, and if the research grant are paid from the research grant supporting institution, it shall be re-paid to the commissioning institution immediately in accordance with the deposit rate.

Chapter 5 Research project management

Article 19 (Research plan amendment) ① (Deleted March 1, 2015)

② (Deleted March 1, 2015)

③ (Deleted March 1, 2015)

④ (Deleted March 1, 2015)

⑤ In the event there is a cause for the principal researcher to be seconded to a domestic or overseas research institution for a period determined by management guidelines for each business sector or more (research year), he/she shall prepare the "domestic/overseas research application" a month prior to the scheduled secondment and obtain the professional institution's approval after the confirmation of the department in charge of the overall sponsored research management.

⑥ If the principle researcher changes the next research plan, he/she shall prepare the "application for amendment to research plan" and submit it to the department in charge of the overall sponsored research management. The person in charge from the department in charge of the overall sponsored research management shall manage the submitted document by confirming a

notification duty to the professional (exclusive) institution for the related matter for each business guideline. (Established March 1, 2015)

1. Amendment on participating researchers
 2. Amendment on equipment & material items to be purchased
 3. Amendment on overseas business travel
 4. Amendment on office supplies to be purchased
 5. Enforcement on for expenses for publishing research papers not reflected on the research plan
- ⑦ If the principle researcher changes the research plan related to the approval cases for each business guideline, he/she shall prepare the “application for amendment to agreement” and obtain the professional institution’s approval after the confirmation of the sponsored research management overseeing department. (Established March 1, 2015)

Article 20 (Submission of research reports) ① The principal researcher shall submit a mid-term report, final report and any other reports to the department in charge of the overall sponsored research management by the due dates set forth in the research contract (agreement).

② If the principal researcher has directly submitted the mid-term report, final report and any other reports to the research grant supporting institution, he/she shall report such fact immediately to the department in charge of the overall sponsored research management.

Article 21 (Management of documents evidencing research grant expenditure) ① The documents evidencing research grant expenditure shall be managed by the department in charge of the overall sponsored research management that supports research in the event a research project is being carried out. For settlement materials, the original evidentiary shall be submitted to the department in charge of the overall sponsored research management upon completion of the research project. The copies of the evidence for implementing non-settlement materials shall be continuously managed by the sponsored research unit department.

② In the event there are any deficiencies with the original copies of the evidentiary documents, the department in charge of the overall sponsored research management may report such an outcome to the unit department that supports research and request that they be improved. The evidentiary documents that have completed final inspection shall be transferred to the document vault and stored in accordance with the retention period as specified by relevant laws and the supporting institution.

③ The documents evidencing the expenditure of the research grant shall be managed under the name of the president or the person who has been authorized by the president. The detailed matters of retention shall be in accordance with the regulations of POSTECH work authorization.

④ The documents evidencing the expenditure of the research grant shall be bound and managed in the order of research grant source, assignment number, budget items, date, and draft number, and in accordance with the common forms prepared and distributed by the research support overseeing department.

Chapter 6 Settlement of research grant

Article 22 (Settlement of research grant) ① The department conducting research shall prepare history report documents and all evidence of expenditures and submit them to the department in charge of the overall sponsored research management within one month after the completion of the research project. However, in the event that there are items for which cause have occurred during the research period such as labor costs and research grant card which have not been paid for by the time of the completion of the research project, the relevant documents shall be submitted immediately upon completion of the cause.

② The balance of expenditure not used by the time the research project has been completed shall

in principle be returned to the research grant supporting institution. Unless otherwise set forth, the balance shall comply with the POSTECH's balance processing standards.

③ In the event the commissioned research project has been completed, settlement shall be undertaken internally after obtaining all settlement documents from the commissioned institution. However, in the event any inadequate expenditure has occurred during the process of settlement, site inspection may be undertaken upon discussion with the commissioned institution.

④ Deficiencies that occurred during the settlement process and the respective procedure for explanation shall be processed through official documents in principle. In the event final settlement has been completed, relevant documents shall be submitted and reported by the settlement completion date as stipulated the supporting institution's settlement guidelines.

⑤ The interest accrued on the research grant shall be processed in accordance with the expenditure standard for interest accrued on research grant. However, in the event of refunding the interest accrued to the research grant supporting institution, the amount calculated is based on the interest rate of the free corporate deposit account. Provided, this shall not apply in the event there are refund standards set by the research grant supporting institution.

Article 23 (Processing research grant balance) ① The research grant balance in principle shall be returned to the research grant supporting institution in the case of a government institutional project (budgets for multiyear agreement projects shall be carried over to the following year upon the professional institution's approval), and unless otherwise set forth, POSTECH's balance processing standard (absorbed by POSTECH) shall be followed.

② In the case of miscellaneous projects (POSCO, industrial entity, etc.), the following table shall be followed: (Amended July 1, 2015)

Category	Government institution	Industrial entity	POSCO	Remarks
Internal research and development expenses	Refund	90% of balance of expenditure	80% of balance of labor costs	Carrying out basic and prior research projects
Research development fund saving	Entire balance in the event of absence of separate regulation	10% of balance of expenditure	20% of balance of labor costs	
			100% of balance of direct costs	

③ In the case of the need of balance establishment, the research department shall submit "internal research and development expenses establishment application form" to the department in charge of the overall sponsored research management within one month after the completion of the relevant research project (Established July 1, 2015).

Article 24 (Interest on research grant) ① The interests on research grant shall be managed as follows:

1. The basic plan for the management and operation of interests on research grant shall obtain the approval of the president (or Executive Director, POSTECH Research and Business Development Foundation) after undergoing review by the relevant committee when needed at the beginning of each academic year.
2. The interest accrued during the research period shall be calculated by project, fund, and bank account in accordance with the interest rate of the financial institution that manages the research grant management account, and shall be managed by the department in charge of the overall sponsored research management.
3. In the event of absence of regulations separately set forth by the research grant supporting institution, the interest accrued on the research grant shall be appropriated as a school expenditure (or POSTECH Research and Business Development Foundation) operating fund

budget for research fund reinvestment purposes.

- ② The scope of use of research grant shall be as follows:
1. Business costs for strengthening basic research capabilities.
 2. Business costs for research promotion strategy.
 3. Subsidies for researcher's research and scholastic activities.
 4. Business needed for the management and operation of research grant.
 5. Business accepted as necessary by the president.

Chapter 7 Overhead costs

Article 25 (Overhead costs (O/H)) ① Overhead costs (O/H) shall be transferred to POSTECH school expenditure accounting or research overhead costs accounting unless otherwise set forth by the research grant supporting institution. They shall be used for the following purposes:

1. Expenses necessary for central management of research grant.
2. Labor costs of support staff needed for research and development.
3. Labor costs for direct support for settlement of principal researcher's research grant.
4. Merit-based bonuses paid to researchers who generated excellent research results and outstanding support staff.
5. Common support expenses needed for research and development.
6. Expenses necessary for research project security such as security equipment purchase, and security training in relation to performing research and development projects.
7. Expenses to support POSTECH's research activity such as costs for operating research-related basic facilities and equipment, purchase costs for scholastic information books and overseas electronic information (Web-DB), laboratory operation support costs, scholastic convention support costs, and expenses for publishing research papers.
8. Expenses necessary for miscellaneous research activity. Provided, however, it may not be paid for personal expenses, (goods, gift money, taxes and assessments, etc.), securities for goods (gift certificates, etc.) and costs of entertainment of others (service) (Amended October 8, 2013).

② Of the overhead costs (O/H) of research projects conducted by independent for-profit organizations, the O/H for the academic department designated as the relevant institution shall be transferred to research overhead costs accounting and be used as institution operating expenses.

③ Overhead costs (O/H) shall be assessed on all research grant commissioned to the outside which the researcher at POSTECH conducts. In the event there are separate regulations of the research grant supporting institution, the highest rate under the supporting institution's regulations shall be assessed. However, unless otherwise set forth in separate regulations of the research grant supporting institution, POSTECH's industrial entity project standards shall be applied.

1. Overhead costs (O/H) assessment rate

Category	Assessment rate	Excepted from assessment
Government institution	Government's disclosed overhead costs rate for relevant year shall be applied	-
Industrial entity	20% of total research grant	Expenses for all commissioned research grant and single-item research equipment/material of 30 million won or more (when reflected in prior research plan)
POSCO	General projects: 100% of labor costs	-
	BOT&StSc projects: 50% of labor costs	

	Training/human resource development programs: No O/H	
Miscellaneous	To be applied in accordance with the nature of the supporting institution (industrial entity project standard to be applied with priority)	-

a. Government institutions

- Single-year projects: Government's disclosed rate for relevant year shall be applied
- Multi-year projects: The government's disclosed overhead costs rate for each stage starting year shall be applied. However, in the event of an agreement for the relevant year, the disclosed rate for the relevant year shall be applied by priority unless the overhead costs rate is otherwise set forth.

※ Whether or not the research project is multiyear shall be determined based on the research contract (agreement). In the case of a contract (agreement) that is difficult to be determined, it shall be determined in accordance with whether the balance of the research grant expenditure is carried over to the next year or not. (Carry-over possible: multi-year, carry-over not possible: single-year)

- b. Industrial entity: In the event single-item equipment and material worth over 30 million won has not actually been purchased, O/H shall be assessed additionally after the fact for up to the unassessed rate.
- c. POSCO: 50% of the amount reflected in professor labor costs shall be paid as professor incentives, and the remaining 50% shall be reused in accordance with the uses of labor costs after reflecting it as professor labor costs.

2. Overhead costs (O/H) shall be assessed by the department in charge of the overall sponsored research management at the beginning of the following month for outside commissioned research projects for which a deposit has been made from early in the month until the end of the month in accordance with the research grant deposit rate and shall be transferred to POSTECH school expenditure accounting or research overhead costs accounting.

3. Overhead costs (O/H) distribution criteria: For government institution projects, overhead costs shall be distributed based on the balance after deducting from the amount to be incorporated into overhead costs the intellectual property application/registration costs, science and cultural activity costs, and research laboratory safety management cost budget item, at a certain rate.

a. General

Category		Government/ Industrial entity	POSCO
General department	POSTECH (priority)	80%	80%
	Academic department/Center	20%	20%
Independent for-profit organization	POSTECH(priority)	50%	20%
	Academic department/Center	50%	80%

* For projects supported for the purpose of management by an independent for-profit organization, the independent for-profit organization rate shall be accepted

* The overhead cost allocation rate shall be applied in accordance with the labor cost burden rate corresponding to research work among tenured faculty standard work.

b. Accelerator Laboratory

- If an affiliate faculty member is the principal researcher

Category	Government institution	Industrial entity	POSCO
POSTECH (priority)	50%	50%	20%
Academic	50%	50%	80%

department/Center			
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- If an accelerator researcher is the principal researcher

Category	Government institution	Industrial entity	POSCO
POSTECH (priority)			
Academic department/Center	100%	100%	100%

Article 26 (Intellectual property application/registration fees, science and cultural activity

expenses, research laboratory safety management expenses) ① Common matters for

intellectual property application/registration fees, science and culture activity fees, and research laboratory safety management expenses shall be as follows:

1. Applies to: All research projects to which management regulations for government research and development projects apply (※ BK21 project, industrial entities, and POSCO projects shall be excluded)
2. Account management: Set common account (research management department) → Administration/settlement/management of evidence (operating department) (※ Report expenditures made or settle to research management department once per year (when needed))
3. Budget management: When contracting a research project, after the budget has been fully reflected and assessed per each project by the research management department, an implemented budget shall be reflected in the common account

② The application and registration fees for intellectual property shall be managed as follows:

1. Incorporation into budget: For each research project, “10% of total overhead costs”
2. Operating department: Intellectual property management department (a separate account shall be granted)
3. Purpose: Expenses necessary for application and registration of intellectual property directly related to a program implementation project or expenses necessary for technology value assessment and other technology transfer
4. Non-recognized items: When an intellectual property application and registration expense has been changed to another item or used for purposes other than the intended purpose

③ The budget implementation authority for science and cultural activity expenses shall be authorized to the working-level department (academic department) in order to promote actual research projects and enhance the proliferation of science technology and culture. However, the budget shall be managed as follows under the principle of public use expense execution at the level of the department.

1. Academic department where the graduate program is established: The budget shall be allocated to the department (academic department) to which the researcher originally belongs
2. Academic department without a graduate program and independent for-profit organization: The budget shall be comprehensively managed after it has been allocated to the research management department
3. (Deleted September 1, 2015)

④ The research laboratory safety management expenses shall be paid as follows under the principle of public use expense execution for the common good of POSTECH to enhance research generation through the creation of a safe research environment, prevent accidents in research laboratories, and protect people engaged in research activities.

1. Incorporation into budget: For each research project, “1% of total labor costs (including unpaid labor costs)”
2. Operating department: safety management and researcher insurance management departments
3. Amount of subsidy: Actual expenses needed in accordance with an annual usage plan for each

department (within the range of budget)

4. Purpose
 - a. The insurance premium as set forth in the law related to the research laboratory safety environment
 - b. Expenses for education and training of those engaged in research activities or research lab safety-related personnel
 - c. Expenses for production, purchase, and distribution of safety rules, books, posters or videos directly related to research laboratory safety
 - d. Health examinations for those engaged in research activities with a risk of exposure to hazardous materials and viruses
 - e. Expenses for installation, maintenance, and rearrangement of facilities for research laboratory safety management
 - f. Expenses for the purchase of protection equipment for those engaged in research activities and those related to research laboratory safety management and expenses for maintenance and management of the equipment
 - g. Expenses for the purchase of various equipment for safety measurement of research laboratory
 - h. Expenses for the preparation and implementation of research laboratory safety inspections and precision safety diagnosis
 - i. Expenses for the research laboratory safety inspection day event
5. Non-recognized items: Expenses used for refund-type insurance enrollment fees or for other intended uses

Article 27 (Technology development expenses) In order to secure basic technology for the principal researcher who conducts a POSCO research project and to explore more projects in the long run, technology development expenses shall be supported as follows:

1. Incorporation into budget

Category	General project	BOT&StSc project	Education and human resource development program
Rate of incorporation	(labor costs + general overhead costs) x 15%	-	-

※ The above rates are subject to change depending on POSCO's management conditions

2. Subsidy standards

Category	Research development fund	Support for principal researcher
Subsidy rate	50%	50%

Chapter 8 Internal management project

Article 28 (Management and operation) ① Internal management projects shall be managed by the relevant the department in charge of the overall sponsored research management in accordance with the use standard for overhead costs pertaining to management, etc. of government research and development projects.

② Unless otherwise determined by the research grant supporting institution, it may be used for research reinvestment purposes by allocating it to operating funds budget for school expenditures (or an POSTECH Research and Business Development Foundation) pursuant to the standards separately set by the president.

③ The internal operating project control and operating responsibilities for projects and

implementation standards shall be managed and operated by the relevant the department in charge of the overall sponsored research management.

Article 29 (Scope of use) ① The research and development costs, which are operated in accordance with regulations relating to management, etc. of government research and development projects (student labor costs pooling system, project carry-over), shall be implemented in accordance with relevant standards.

② Implementation expenses pursuant to the overhead cost uses of the government research and development project management system (human resource support costs, sponsored research costs and performance support costs)

③ Other business accepted by the president to be necessary.

Article 30 (Project category and department in charge) ① Projects generated in accordance with the regulations relating to the management of government research and development projects: carried over projects, student labor costs pooling projects, intellectual property application and registration expenses, science and cultural activity expenses, research laboratory safety management expenses, accumulated O/H establishing projects (Sponsored Research team and Research Planning team)

② Projects managed and implemented separately as deemed necessary by the president: department research management expenses, deposit interest projects, accumulated internal research and development projects, accumulated labor costs pooling projects (school expenditures), technology fee research and development reinvestment projects, accumulated technology transfer projects, accumulated test analysis fee projects, independent institution management projects (Planning and Budget team, Center for Business Development, Technical Support Center and Sponsored Research team)

③ In principle, these guidelines shall be followed for matters relating to internal operation projects, but may be separately set as needed. (Amended October 8, 2013)

Chapter 9 Management of research documents

Article 31 (Definition of research documents) Research documents refer to all the documents that accompany the research projects implemented by POSTECH, as follows:

1. Research plan: A document in which the objectives, contents, method, application method of the conducted research, overall research grant table, etc. are specified.
2. Research agreement: A document entered into by the supporting institution and POSTECH for the implementation of a research project.
3. Evidence of the implementation of research grant expenditure: Documents related to the evidence of payments of relevant research grant.
4. Other documents related to conducting a research.

Article 32 (Retention Period) ① In the event there are regulations of the research grant supporting institution, they shall be applied with priority. If not, research documents shall be stored in a physical form for five years after the completion of the relevant research period.

② The retention period for research documents may be extended or reduced upon the approval of the Executive Director, POSTECH Research and Business Development Foundation.

Article 33 (Processing after Retention Period) ① For research documents over the retention period, research plans and research agreements shall be scanned by the person in charge of the project prior to their discard and be turned into electronic files in the form of PDFs.

② Electronic document reference shall be registered and maintained in the POVIS electronic document system in accordance with the following arrangement standards:

1. The file names shall be recorded by distinguishing the plan and the agreement in the order of

POVIS assignment number and principal researcher.

([Plan]4.xxxxxxx_John Doe, [Agreement]4.xxxxxxx_John Doe)

2. The folder categorization in the POVIS electronic document system shall be in the order of relevant year, → POSTECH/Government/Industrial entity/POSCO → Detailed classification (in the case of government, by departments).
- ③ The stored electronic document shall be managed by assigning access rights.

Article 34 (Discard of Research Documents) ① The discard of research documents shall be in accordance with the discard method as stipulated in the Korean Act on the Management of Public Archives and its Enforcement Decree.

- ② Those in charge of discard shall proceed after verifying whether the electronic files have been created pursuant to the process in Article 33.

Chapter 10 Miscellaneous

Article 35 (Internal Inspection of Research Grant Management) ① The department in charge of the overall sponsored research management shall establish and implement an internal inspection plan for research grant management at least once per year in accordance with the POSTECH audit regulations.

- ② The internal inspection shall proceed in a form of a site inspection for research projects in progress or finished research projects, and the specimen inspection rate shall be more than a certain percentage of the entire project (20%).

③ Detail matters such as projects and departments subject to internal inspection, a number of inspectors, a method of inspection, etc. shall be separately determined when establishing plans.

④ After the completion of internal inspection, a report on the results thereof shall be prepared and confirmed by the head of the department in charge of the overall sponsored research management. In particular, in the event of the discovery of significant matters during the internal inspection, such fact shall be immediately reported to the Executive Director, POSTECH Research and Business Development Foundation through an internal report and appropriate measures shall be taken.

Article 36 (Dealing with Problems) The head of the department in charge of the overall sponsored research management shall build a system to efficiently address the problems of researchers and research support personnel and monitor through surveys, seminars or meetings on a regular basis.

Article 37 (Job Training related to Research) ① the department in charge of the overall sponsored research management shall annually establish and implement a plan for regular internal job training for researchers and research support personnel.

- ② Research-related job training shall be efficiently operated by including frequent training, programs and contents for the enhancement of job professionalism, skills development, security management, research ethics, research grant management, etc., to ensure practical training.

Addendum

These guidelines shall be enacted and implemented from July 15, 2010.

Addendum

These guidelines shall be amended and implemented from January 1, 2012.

Addendum

These guidelines shall be amended and implemented from March 1, 2012.

Addendum

These guidelines shall be amended and implemented from April 30, 2013.

Addendum

These guidelines shall be amended and implemented from October 8, 2013.

Addendum

These guidelines shall be amended and implemented from April 1, 2014.

Addendum

These guidelines shall be amended and implemented from January 1, 2015.

Addendum

These guidelines shall be amended and implemented from March 1, 2015.

Addendum

These guidelines shall be amended and implemented from July 1, 2015.

Addendum

These guidelines shall be amended and implemented from September 1, 2015.

Addendum

These guidelines shall be amended and implemented from September 28, 2016.

(Table 1) Management of evidentiary documents for research grant

Category			Evidentiary document		Method of implementation
Category	Detailed category	Most detailed category	When implemented	When settled (Additional)	
Wages	Internal labor costs	-	-	-	-
	Outside labor costs	Researcher labor costs	Monthly expenditure plan, participating researcher allocation, employment agreement	Labor costs fund transfer proof of deposit*, Confirmation of payment of corporate contributions	Fund transfer
	Student labor costs	Student labor costs	Monthly expenditure plan, participating researcher allocation	Labor costs fund transfer proof of deposit*	Fund transfer
Direct costs	Research Equipment/ Materials Costs	Costs for research equipment/materials and facilities	Credit card sales receipts (Tax invoices), estimates, sales invoices	Domestic/foreign capital purchase confirmation*	research grant (corporate) card (Fund transfer)
		Material costs for reagents		Domestic/foreign capital purchase confirmation *	Research grant (corporate) card (Fund transfer)
		Test analysis fees		Test analysis assessment confirmation* RIST Test analysis assessment confirmation*	Research grant (corporate) card (Fund transfer)
		Prototype production costs		Domestic/overseas purchase confirmation *	Research grant (corporate) card (Fund transfer)
	Research Activity expenses	Domestic travel expenses	Business travel applications (Daily allowance and meals shall be paid in set amounts)	All needed evidence for out-of-pocket expense settlement for transportation expenses, lodging fees, academic association fees, etc.	Fund transfer (research grant card)
		Overseas travel expenses	Business travel applications (Daily allowance and meals shall be paid in set amounts)	All needed evidence for out-of-pocket expense settlement for transportation expenses, lodging fees, academic association fees, etc. and all documents for proof of arrival and departure	research grant (corporate) card (Fund transfer)
		Cost of acceptance and handling charges	Credit card sales receipts (Tax invoices), estimates, Sales invoices	Confirmation for payment of original text copy use fee * Confirmation for payment of postage *	Research grant (corporate) card (Fund transfer)
	Technology information activity expenses	Professional fees	Professional hiring applications, Consulting fees (Speaking fees) receipts, Requests for approval, Seminar material (if applicable)	-	Fund transfer
		Book purchase expense	Credit card sales receipts (tax invoices), cover page of book purchased, book registration details	Book registration application *	Research grant (corporate) card (Fund transfer)
		Meeting expenses	Credit card sales receipts, minutes of meeting	-	Research grant (corporate) card
		Event expenses	Requests for approval, credit card sales receipts (Tax invoices), miscellaneous evidence	-	Research grant (corporate) card (Fund transfer)
		Registration fees for academic associations	Receipts for academic association registration, schedules, fund transfer confirmation (Internet banking, etc.)	-	Research grant (corporate) card (Fund transfer)

		Research meeting expenses	Credit card sales receipts, minutes of meeting	-	Research grant (corporate) card
	Research allowances	Researcher incentives	Requests for approval, table for contribution evaluation	Labor costs fund transfers proof of deposit*	Fund transfer
		Professor incentives	Requests for approval, table for contribution evaluation	-	Fund transfer
Commissioned research and development expenses	Commissioned research and development expenses	Commissioned research grant	Requests for approval, invoices, official letters requesting payment	-	Fund transfer
Indirect costs	Overhead costs	Overhead costs	Requests for approval	Indirect research expenses assessment confirmation *	Fund transfer
		Intellectual property application/registration expenses	Receipts (Tax invoices, etc.), IP application·details of registration, IP application·copy of registration	-	Fund transfer (corporate card)
		Science and cultural activity expenses	Credit card sales receipts (Tax invoices), estimates, Sales invoices	-	Fund transfer (corporate card)
		Research laboratory safety management expenses	Credit card sales receipts (Tax invoices), estimates, Sales invoices	-	Fund transfer (corporate card)

*Print and attach a confirmation from POVIS joint evidentiary management (if applicable)