CONFORMED COPY

LOAN NUMBER 3203 KO

Loan Agreement

(Universities Science and Technology Research Project)

between

REPUBLIC OF KOREA

and

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

Dated August 10, 1990

LOAN NUMBER 3203 KO

LOAN AGREEMENT

AGREEMENT, dated August 10, 1990, between REPUBLIC OF KOREA (the Borrower) and INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT (the Bank).

WHEREAS the Borrower, having satisfied itself as to the feasibility and priority of the Project described in Schedule 2 to this Agreement, has requested the Bank to assist in the tine mains of the Project; and

WHEREAS the Bank has agreed, on the basis, inter alia, of the foregoing, to extend the Loan to the Borrower upon the terms and conditions set forth in this Agreement;

NOW THEREFORE the parties hereto hereby agree as follows:

#### ARTICLE I

#### General Conditions; Definitions

Section 1.01. The "General Conditions Applicable to Loan and Guarantee Agreements" of the Bank, dated January 1, 1985, with the last sentence of Section 3.02 deleted (the General Conditions) constitute an integral part of this Agreement.

Section 1.02. Unless the context otherwise requires, the several terms defined in the General Conditions have the respective meanings therein set forth and the following additional terms have the following meanings:

- (a) "Sub-loan" means a loan made or proposed to be made by the Borrower to a private university out of the proceeds of the Loan for carrying out the Project; and
- (b) "Special Account" means the account referred to in Section 2.02 (b) of this Agreement.

#### ARTICLE II

#### The Loan

Section 2.01. The Bank agrees to lend to the Borrower, on the terms and conditions set forth or referred to in the Loan Agreement, an amount in various currencies equivalent to forty-five Million dollars (\$45,000,000).

Section 2.02. (a) The amount of the Loan may be Withdrawn from the Loan Account in accordance with the provisions of Schedule 1 to this Agreement for expenditures made (or, if the Bank shall so agree, to be made) in respect of the reasonable cost of goods and services required for the Project described in Schedule 2 to this Agreement and to be financed out of the proceeds of the Loan.

- (b) The Borrower shall, for the purposes of the Project, open and maintain in dollars a special deposit account, in the Korea Exchange Bank on terms and conditions satisfactory to the Bank. Deposits into, and payments out of, the Special Account shall be made in accordance with the provisions of Schedule 5 to this Agreement.
- Section 2.03. The Closing Date shall be December 31, 1995 or such later date as the Bank shall establish. The Bank shall promptly notify the Borrower of such later date.

Section 2.04. The Borrower shall pay to the Bank a commitment charge at the rate of three-fourths of one percent (3/4 of 1%) per annum on the principal amount of the Loan not withdrawn from time to time.

Section 2.05. (a) The Borrower shall pay interest on the principal amount of the Loan withdrawn and outstanding from time to time, at a rate for each Interest Period equal to the Cost of Qualified Borrowings determined in respect of the preceding Semester, plus one-half of one percent (1/2 of 1%). On each of the dates specified in Section 2.06 of this Agreement, the Borrower shall pay interest accrued on the principal amount outstanding during the preceding Interest Period, calculated at the rate applicable during such Interest Period.

- (b) As soon as practicable after the end of each Semester, the Bank shall notify the Borrower of the Cost of Qualified Borrowings determined in respect of such Semester.
  - (c) For the purposes of this Section:
  - (i) "Interest Period" means a six-month period riding

on the date immediately preceding each date specified in Section 2.06 of this Agreement, beginning with the Interest Period in which this Agreement is signed.

- (ii) "Cost of Qualified Borrowings" means the cost, as reasonably determined by the Bank and expressed as a percentage per annum, of the outstanding borrowings of the Bank drawn down after June 30, 1982, excluding such borrowings or portions thereof as the Bank has allocated to fund: (A) the Bank's investments; and (B) loans which may be made by the Bank after July 1, 1989 bearing interest rates determined otherwise than as provided in paragraph (a) of this Section.
- (iii) "Semester" means the first six months or the second six months of a calendar year.
- (d) On such date as the Bank may specify by no less than six months' notice to the Borrower, paragraphs (a), (b) and (c) (iii) of this Section shall be amended to read as follows:
  - "(a)The Borrower shall pay interest on the principal amount of the Loan withdrawn and outstanding from time to time, at a rate for each Quarter equal to the Cost of Qualified Borrowings determined in respect of the preceding Quarter, plus one-half of one percent (1/2 of 1%). On each of the dates specified in Section 2.06 of this Agreement, the Borrower shall pay interest accrued on the principal amount outstanding during the preceding Interest Period, calculated at the rates applicable during such Interest Period."
  - "(b) As soon as practicable after the end of each Quarter, the Bank shall notify the Borrower of the Cost of Qualified Borrowings determined in respect of such Quarter."
  - "(c) (iii) 'Quarter' means a three-month period commencing on January 1, April 1, July 1 or October 1 in a calendar year."
- Section 2.06. Interest and other charges shall be payable semiannually on May 15 and November 15 in each year.

Section 2.07. The Borrower shall repay the principal amount of the Loan in accordance with the amortization schedule set forth in Schedule 3 to this Agreement.

## ARTICLE III

#### Execution of the Project

Section 3.01. The Borrower declares its commitment to the objectives of the Project as set forth in Schedule 2 to this Agreement, and, to this end, shall carry out the Project with due diligence and efficiency and in conformity with appropriate administrative and financial practices, and shall provide, promptly as needed, the funds, facilities, services and other resources required for the Project.

Section 3.02. Except as the Bank shall otherwise agree, procurement of the goods required for the Project and to be financed out of the proceeds of the Loan shall be governed by the provisions of Schedule 4 to this Agreement.

Section 3.03. For the purpose of carrying out the Project, the Borrower shall: (i) select the universities in accordance with a criteria acceptable to the Bank; and (ii) allocate the funds to the selected universities in accordance with the Guidelines approved by the Bank.

Section 3.04. For the purpose of carrying out the Project, the Borrower shall: (i) enter into Sub-loans with the private universities on terms and conditions acceptable to the Bank; and (ii) make the funds available to the public universities as a grant.

## ARTICLE IV

## Particular Covenants

Section 4.01. (a) The Borrower shall maintain or cause to be maintained records and accounts adequate to reflect in accordance with sound accounting practices the operations, resources and expenditures in respect of the Project of the departments or agencies of the Borrower responsible for carrying out the Project or any part thereof.

## (b) The Borrower shall:

- (i) have the records and accounts referred to in paragraph (a) of this Section including those for the Special Account for each financial year audited, in accordance with appropriate auditing principles consistently applied, by independent auditors acceptable to the Bank;
- (ii) furnish to the Bank as soon as available, but in any case not later than six months after the end of each such year certified copies of the report of such audit by said auditors, of such scope and in such detail as the Bank shall have reasonably requested; and
- (iii) furnish to the Bank such other information concerning such records, accounts and the audit thereof as the Bank shall from time to time reasonably request.
- (c) For all expenditures with respect to which withdrawals from the Loan Account were made on the basis of statements of expenditure, the Borrower shall:
  - (i) maintain or cause to be maintained, in accordance with paragraph (a) of this Section, records and accounts reflecting such expenditures;
  - (ii) retain, until at least one year after the Bank has received the audit report for the fiscal year in which the last withdrawal from the Loan Account was made, all records (contracts, orders, invoices, bills, receipts and other documents) evidencing such expenditures;
  - (iii) enable the Bank's representatives to examine such records; and
  - (iv) ensure that such records and accounts are included in the annual audit referred to in paragraph (b) of this Section and that the report of such audit contains a separate opinion by said auditors as to whether the statements of expenditure submitted during such fiscal year, together with the procedures and internal controls involved in their preparation, can be relied upon to support the related withdrawals.

# ARTICLE V

Effective Date; Termination

Section 5.01. The date ninety (90) days after the date of this

Agreement is hereby specified for the purposes of Section 12.04 of the General Conditions.

#### ARTICLE VI

Representative of the Borrower; Addresses

Section 6.01. The Minister of Finance of the Borrower is designated as representative of the Borrower for the purposes of  $\frac{1}{2}$ Section 11.03 of the General Conditions.

Section 6.02. The following addresses are specified for the purposes of Section 11.01 of the General Conditions:

For the Borrower:

Ministry of Finance Kwachon Republic of Korea

Cable address: Telex:

> MOF K23243

Kwachon, Korea

For the Bank:

International Bank for Reconstruction and Development 1818 H Street, N.W. Washington, D.C. 20433 United States of America

Cable address:

INTBAFRAD 82987 (FTCC) 248423 (RCA) Washington, D.C. 64145 (WUI) or 197688 (TRT)

Telex:

IN WITNESS WHEREOF, the parties hereto, acting through their duly authorized representatives, have caused this Agreement to be signed in their respective names in the District of Columbia, United States of America, as of the day and year first above written.

REPUBLIC OF KOREA

By /s/ Sohn Myung Hyun Authorized Representative

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

By /s/ Heinz Vergin

Acting Regional Vice President

Asia

#### SCHEDULE 1

#### Withdrawal of the Proceeds of the Loan

1. The table below sets forth the Categories of items to be financed out of the proceeds of the Loan, the allocation of the amounts of the Loan to each Category and the percentage of expenditures for items so to be financed in each Category:

Amount of the Loan Allocated % of (Expressed in Expenditures Dollar Equivalent) to be Financed Category 40,500,000 (1) Equipment 100% of foreign expenditures, 100% of local expenditures (ex-factory cost) and 65% of local expenditures for other items procured locally

(2) Unallocated

4,500,000

TOTAL

45,000,000

- 2. For the purposes of this Schedule:
- (a) the term "foreign expenditures" means expenditures in the currency of any country other than that of the Borrower for goods or services supplied from the territory of any country other than that of the Borrower; and
- (b) the term "local expenditures" means expenditures in the currency of the Borrower or for goods or services supplied from the territory of the Borrower.
- 3. Notwithstanding the provisions of paragraph 1 above, no withdrawals shall be made in respect of payments made for expenditures prior to the date of this Agreement.

#### SCHEDULE 2

# Description of the Project

The objectives of the Project are to assist selected universities in broadening and deepening their basic research programs in the priority fields of science and technology and to strengthen science teacher education programs.

The Project consists of the following, subject to such modifications thereof as the Borrower and the Bank may agree upon from time to time to achieve such objectives:

The carrying out of basic research in selected universities, including provision of specialized equipment, associated civil works and consumable materials.

\* \* \*

The Project is expected to be completed by June 30, 1995.

# SCHEDULE 3

#### Amortization Schedule

Payment of Principal

(expressed in dollars)

Date Payment Due On each May 15 and November 15 beginning November 15, 1995 through May 15, 2005

2,250,000

\* The figures in this column represent dollar equivalents determined as of the respective dates of withdrawal. See General Conditions, Sections 3.04 and 4.03.

# Premiums on Prepayment

Pursuant to Section 3.04 (b) of the General Conditions, the premium payable on the principal amount of any maturity of the Loan to be prepared shall be the percentage specified for the applicable time of prepayment below:

Time of Prepayment

Premium

The interest rate (expressed as a percentage per annum) applicable to the balance outstanding on the Loan on the day of prepayment multiplied by:

Not more than three years before maturity	0.20
More than three years but not more than six years before maturity	0.40
More than six years but not more than 11 years before maturity	0.73
More than 11 years but not more than 13 years before maturity	0.87
More than 13 years before maturity	1.00

#### SCHEDULE 4

#### Procurement

# Part A: International Competitive Bidding

Except as provided in Part C hereof, goods shall be procured under contracts awarded in accordance with procedures consistent with those set forth in Sections I and II of the "Guidelines for Procurement under IBRD Loans and IDA Credits" published by the Bank in May 1985 (the Guidelines).

## Part B: Preference for Domestic Manufacturers

In the procurement of goods in accordance with the procedures described in Part A hereof, goods manufactured in Korea may be granted a margin of preference in accordance with, and subject to, the provisions of paragraphs 2.55 and 2.56 of the Guidelines and paragraphs 1 through 4 of Appendix 2 thereto.

# Part C: Other Procurement Procedures

Items or groups of items estimated to cost less than the equivalent of \$200,000 per contract, up to an aggregate amount not

to exceed the equivalent of \$6,800,000, may be procured under contracts awarded on the basis of comparison of price quotations solicited from a list of at least three suppliers eligible under the Guidelines, in accordance with procedures acceptable to the Bank.

- Part D: Review by the Bank of Procurement Decisions
- 1. Review of invitations to bid and of proposed awards and final contracts:
- (a) Before bids are invited, the Borrower shall furnish to the Bank, the text of the invitations to bid and the specifications, other bidding and draft contract documents for the supply goods.
- (b) With respect to each contract, the procedures set forth in paragraphs 3 and 4 of Appendix 1 to the Guidelines shall apply. Where payments for such contract are to be made out of the Special Account, said procedures shall be modified to ensure that the two conformed copies of the contract together with the other information required to be furnished to the Bank pursuant to said paragraph 3 shall be furnished to the Bank as part of the evidence to be furnished pursuant to paragraph 4 of Schedule 5 to this Agreement.
- (c) The provisions of the preceding subparagraph (b) shall not apply to contracts on account of which the Bank has authorized withdrawals from the Loan Account on the basis of statements of expenditures. Such contracts shall be retained in accordance with Section 4.01 (c) (ii) of this Agreement.
- 2. The figure of 15% is hereby specified for purposes of paragraph 4 of Appendix 1 to the Guidelines.

## SCHEDULE 5

#### Special Account

- 1. For the purposes of this Schedule:
- (a) the term "eligible Category" means Category (1) set forth in the table in paragraph 1 of Schedule 1 to this Agreement;
- (b) the term "eligible expenditures" means expenditures in respect of the reasonable cost of goods and services required for the Project and to be financed out of the proceeds of the Loan allocated from time to time to the eligible Category in accordance with the provisions of Schedule 1 to this Agreement; and
- (c) the term "Authorized Allocation" means an amount equivalent to \$3,000,000 to be withdrawn from the Loan Account and deposited into the Special Account pursuant to paragraph 3 (a) of this Schedule.
- 2. Payments out of the Special Account shall be made exclusively for eligible expenditures in accordance with the provisions of this Schedule.
- 3. After the Bank has received evidence satisfactory to it that the Special Account has been duly opened, withdrawals of the Authorized Allocation and subsequent withdrawals to replenish the Special Account shall be made as follows:
- (a) For withdrawals of the Authorized Allocation, the Borrower shall furnish to the Bank a request or requests for a deposit or deposits which do not exceed the aggregate amount of the Authorized Allocation. On the basis of such request or requests, the Bank shall, on behalf of the Borrower, withdraw from the Loan Account and deposit in the Special Account such amount or amounts as the Borrower shall have requested.
  - (b) (i) For replenishment of the Special Account, the Borrower shall furnish to the Bank requests for deposits into the Special

Account at such intervals as the Bank shall specify.

- (ii) Prior to or at the time of each such request, the Borrower shall furnish to the Bank the documents and other evidence required pursuant to paragraph 4 of this Schedule for the payment or payments in respect of which replenishment is requested. On the basis of each such request, the Bank shall, on behalf of the Borrower, withdraw from the Loan Account and deposit into the Special Account such amount as the Borrower shall have requested and as shall have been shown by said documents and other evidence to have been made out of the Special Account for eligible expenditures. All such deposits shall be withdrawn by the Bank from the Loan Account under the respective eligible Category, and in the respective equivalent amounts, as shall have been justified by said documents and other evidence.
- 4. For each payment made by the Borrower out of the Special Account, the Borrower shall, at such time as the Bank shall reasonably request, furnish to the Bank such documents and other evidence showing that such payment was made exclusively for eligible expenditures.
- 5. Notwithstanding the provisions of paragraph 3 of this Schedule, the Bank shall not be required to make further deposits into the Special Account:
- (a) if, at any time, the Bank shall have determined that all further withdrawals should be made by the Borrower directly from the Loan Account in accordance with the provisions of Article V of the General Conditions and paragraph (a) of Section 2.02 of this Agreement; or
- (b) once the total unwithdrawn amount of the Loan allocated to the eligible Category for the Project, less the amount of any outstanding special commitment entered into by the Bank pursuant to Section 5.02 of the General Conditions with respect to the Project, shall equal the equivalent of twice the amount of the Authorized Allocation.

Thereafter, withdrawal from the Loan Account of the remaining unwithdrawn amount of the Loan allocated to the eligible Category for the Project shall follow such procedures as the Bank shall specify by notice to the Borrower. Such further withdrawals shall be made only after and to the extent that the Bank shall have been satisfied that all such amounts remaining on deposit in the Special Account as of the date of such notice will be utilized in making payments for eligible expenditures.

- 6. (a) If the Bank shall have determined at any time that any payment out of the Special Account: (i) was made for a expenditure or in an amount not eligible pursuant to paragraph 2 of this Schedule; or (ii) was not justified by the evidence furnished to the Bank, the Borrower shall, promptly upon notice from the Bank: (A) provide such additional evidence as the Bank may request; or (B) deposit into the Special Account (or, if the Bank shall so request, refund to the Bank) an amount equal to the amount of such payment or the portion thereof not so eligible or justified. Unless the Bank shall otherwise agree, no further deposit by the Bank into the Special Account shall be made until the Borrower has provided such evidence or made such deposit or refund, as the case may be.
- (b) If the Bank shall have determined at any time that any amount outstanding in the Special Account will not be required to cover further payments for eligible expenditures, the Borrower

shall, promptly upon notice from the  ${\tt Bank}\,,$  refund to the  ${\tt Bank}$  such outstanding amount.

- (c) The Borrower may, upon notice to the Bank, refund to the Bank all or any portion of the funds on deposit in the Special Account.
- (d) Refunds to the Bank made pursuant to paragraphs 6 (a), (b) and (c) of this Schedule shall be credited to the Loan Account for subsequent withdrawal or for cancellation in accordance with the relevant provisions of this Agreement, including the General Conditions.