**Extension Report of R & D Project of BCSIR**

1. Name of the Unit : BCSIR Laboratories, Chattogram.
2. Name of the Project : Development of Molecular Sieve from available domestic biomass use in petrochemical refining industry.
3. Name of the Project Leader & Associates: a) Leader: Dr. Md. Abdus Salam, SSO

b) Dr. Dipankar Chakraborty, SSO

c) Kawsar Ahmed, SO

d) Md. Shehan Habib, SO

e) Md. Sahab Uddin, SO

1. Objective of the Project : a) To synthesis and characterization of Molecular Sieve to get the optimum production rate of petrochemicals.

b) To set up a small scale production plant/pilot plant of Molecular Sieve to support petroleum industries

1. Methodology: Molecular Sieve used in petroleum refinery was developed from rice husk as silica source. Silica was derived from clean and dry rice husk treated thermally and chemically. Obtained silica was mixed with aluminate solution and stirred for 30 minutes at certain temperature. After the completion of reaction, produced molecular sieve was collected by filtration. This molecular sieve was dried and given a pellet form to display.
2. Progress Achieved :

a) Pyrolyser fabrication completed.

b) Lab scale product developed or synthesized.

c) Review article submitted. “Prospect of molecular sieves production using rice husk of Bangladesh: A review.”

1. Duration of the Project : 3 years

(More than 2 years explain year wise financial breakup)

1. Expected extension period: 1(one) year
2. Amount of fund used to complete the work : Ten lakh taka only (10,00,000/-Taka)
3. A) Paper Published (Enclosed 1st page of the paper) :

B) Process (Developed/ Accepted/ Lease out) :

C) Patent right :

1. Impact of the project in society and nation : Value added product from domestic waste and no need to import molecular sieve from foreign country.
2. Remarks(If any) :

Signature of Project leader Signature of Director