# <u>2009 - 10</u>

S. NO.	NFNO	TITLE		PROV FILING DATE		APPLICATION NO.		PATENT NO.
1		CATALYST FOR SYNTHESIS OF 2- AND 4-PICOLINES	PASHUPATI DUTTA, SUBHASH CHANDRA ROY, SHYAM KISHORE ROY, TARUN KANTI GOSWAMI		22/03/2004	10/806063	07/04/2009	7514559
2		A PROCESS FOR THE PRODUCTION OF PLANT GROWTH STIMULATOR FROM FLY ASH	RAO SR, GHOSH SK, SINGH G, HAZRA SK		20/03/2003	03712626.5	15/07/2009	1613568
3		A PROCESS FOR THE PREPARATION OF A CATALYST SUPPORTED ON TITANIUM PILLARED CLAY, USEFUL FORM PRODUCING HETROAROMATIC NITRILES	ROY SK, RAY SC, DUTTA P, NANDI LN, YADAV SN		15/11/2005	03826467.6	29/07/2009	ZL03826467.6
4		A PROCESS FOR SYNTHESIS OF DIPHENIC ACID FROM PHENANTHRENE	TIWARI KK, BIT KC, THAKUR SK, MISHRA KK, RAO SRK		27/06/2005	2002348768	06/08/2009	2002348768

5	A SYSTEM FOR PREDICTION OF GAS PRODUCTION AND UNIT HEAT CONTENT OF GAS FOR COAL GASIFICATION USING STEAM AND AIR	MALL BK, SOHONY RA, RAO SRK, BASU SK, SEN K	 27/04/2006	2005-510112	14/08/2009	4357484
6	PROCESS FOR THE PREPARATION OF DIPHENIC ACID	TIWARI KAUSHAL KISHORE, BIT KAMARES CHANDRA, THAKUR SANJAY KUMAR, MISHRA KAMLESH KUMAR, RAO SUKURU RAMKRISHNA	 20/03/2003	10/393407	15/09/2009	7589230
7	A PROCESS FOR THE PRODUCTION OF PLANT GROWTH STIMULATOR FROM FLY ASH	RAO SR, GHOSH SK, SINGH G, HAZRA SK	 23/09/2005	2003217440	10/12/2009	2003217440
8	A PROCESS FOR THE PREPARATION OF A CATALYST USEFUL FOR CONVERSION OF 3- & 4-CYANOPYRIDINES TO USEFUL PRODUCTS	RAY SC, SINGH B, MAHARAJ S, PRASAD H, SARKAR PK, DUTTA P, ROY SK, BANDOPADHYAY AK, SEN R	 02/08/2005	02830188.9	16/12/2009	ZL02830188.9
9	A PROCESS FOR THE MANUFACTURE OF ISONICOTINIC ACID HYDRAZIDE (INH) USEFUL IN THE TREATMENT OF TUBERCULOSIS.	SC RAY, LN NANDI, B SINGH, HL PRASAD, S MAHARAJ, PK SARKAR, P DUTTA, SK ROY, SN YADAV, AK BANDOPADHYAY	 22/06/2005	0335DEL2002	18/12/2009	195686
10	A PROCESS FOR SYNTHESIS OF DIPHENIC ACID FROM PHENANTHRENE	TIWARI KK, BIT KC, THAKUR SK, MISHRA KK, RAO SRK	 08/08/2005	2004-561723	29/01/2010	4448035

### <u>2010 - 11</u>

SNo	NFNO	Title	Inventors	Prov. Filing Date	Comp. Filing Date	Application No.	Grant Date	Patent No.
1		A CATALYST USEFUL FOR SYNTHESIS OF 2-&4-PICOLINES	PASHUPATI DUTTA, SUBHASH CHANDRA ROY, SHYAM KISHORE ROY, TARUN KANTI GOSWAMI		21/07/2006	548652	08/04/2010	548652
2	0507NF2003/AU	A CATALYST USEFUL FOR SYNTHESIS OF 2-&4-PICOLINES	PASHUPATI DUTTA, SUBHASH CHANDRA ROY, SHYAM KISHORE ROY, TARUN KANTI GOSWAMI		20/06/2006	2003300723	29/04/2010	2003300723
3	0507NF2003/CA	A CATALYST USEFUL FOR SYNTHESIS OF 2-&4-PICOLINES	PASHUPATI DUTTA, SUBHASH CHANDRA ROY, SHYAM KISHORE ROY, TARUN KANTI GOSWAMI		29/06/2006	2552158	22/06/2010	2552158
4		A PROCESS FOR THE PREPARATION OF A CATALYST SUPPORTED ON TITANIUM PILLARED CLAY, USEFUL FORM PRODUCING HETROAROMATIC NITRILES	ROY SK, RAY SC, DUTTA P, NANDI LN, YADAV SN		20/11/2005	03816516.3	08/09/2010	1617946
5		A SYSTEM FOR PREDICTION OF GAS PRODUCTION AND UNIT HEAT CONTENT OF GAS FOR COAL GASIFICATION USING STEAM AND AIR	MALL BK, SOHONY RA, RAO SRK, BASU SK, SEN K		04/05/2006	2003274480	09/09/2010	2003274480

6	0166NF2002/CA	A PROCESS FOR THE PREPARATION OF A	RAY SC, SINGH B, MAHARAJ S,	 23/06/2005	2511728	21/12/2010	2511728
		CATALYST USEFUL FOR CONVERSION	PRASAD H, SARKAR PK, DUTTA				
		OF 3-& 4-CYANOPYRIDINES TO USEFUL	P, ROY SK, BANDOPADHYAY				
		PRODUCTS	AK, SEN R				

# <u>2011 – 12</u>

S. NO.	NFNO	TITLE		PROV FILING DATE		APPLICATION NO.	GRANT DATE	PATENT NO.
1		PROCESS FOR CONVERSION OF CYANOPYRIDINE TO NICOTINAMIDES AND CATALYST THEREFOR,PROCESS FOR PREPARING SAID CATALYST.	RAY SC, SINGH B, MAHARAJ S, PRASAD H, SARKAR PK, DUTTA P, ROY SK, BANDOPADHYAY AK, SEN R		20/02/2008	200810005988.5	27/07/2011	ZL200810005988.5
2		A PROCESS FOR PREPARATION OF DIPHENIC ACID	TIWARI KK, BIT KC, THAKUR SK, MISHRA KK, RAO SRK		23/06/2005	2511727	06/09/2011	2511727
3		METHOD OF PRODUCING DIMETHYLPHTHALATE FROM NAPTHALENE BASED CHEMICALS	KUMARES CHANDRA BIT		05/09/2005	2004218175	08/09/2011	2004218175

# <u>2012 – 13</u>

# **Granted in Foreign Countries**

S. NO.	NFNO	TITLE	INVENTORS	FILING		APPLICATION NO.		PATENT NO.
1			MALL BK, SOHONY RA, RAO SRK, BASU SK, SEN K		02/05/2006	03758455.4	19/12/2012	EP1678279
2		A SYSTEM FOR PREDICTION OF GAS PRODUCTION AND UNIT HEAT CONTENT OF GAS FOR COAL GASIFICATION USING STEAM AND AIR	MALL BK, SOHONY RA, RAO SRK, BASU SK, SEN K		02/05/2006	03758455.4	19/12/2012	EP1678279
3		A SYSTEM FOR PREDICTION OF GAS PRODUCTION AND UNIT HEAT CONTENT OF GAS FOR COAL GASIFICATION USING STEAM AND AIR	MALL BK, SOHONY RA, RAO SRK, BASU SK, SEN K		02/05/2006	03758455.4	19/12/2012	EP1678279

# $\underline{2013-14}$

**Granted in Foreign Countries: NIL** 

### <u>2014-15</u>

S. NO.	NFNO	TITLE	INVENTORS	FILING		APPLICATION NO.		PATENT NO.
1			SUDHIR KUMAR KASHYAP, AMALENDU SINHA		31/Jan/2011	11708315.4	23/Apr/2014	2536919
2			SUDHIR KUMAR KASHYAP, AMALENDU SINHA		18/Sep/2012	11708315.4	23/Apr/2014	2536919
3	0148NF2008/US	MONITORING SYSTEM FOR OPENCAST MINES	LAKSHMI KANTA BANDYOPADHYAY, SWADES KUMAR CHAULYA, PANKAJ KUMAR MISHRA		10/Feb/2012	13/265585	26/Aug/2014	8816850

# <u>2015 – 16</u>

S. NO.	NFNO	TITLE	INVENTORS	PROV FILING DATE	COMP FILING DATE			PATENT NO.
1	0041NF2008/EP		LAKSHMI KANTA BANDYOPADHYAY, SWADES KUMAR CHAULYA, PANKAJ KUMAR MISHRA		26/Mar/2009	09725268.8	17/Feb/2016	2269088
2	0041NF2008/GB	FOR MINES	LAKSHMI KANTA BANDYOPADHYAY, SWADES KUMAR CHAULYA, PANKAJ KUMAR MISHRA		26/Mar/2009	09725268.8	17/Feb/2016	2269088
3	0041NF2008/CZ		LAKSHMI KANTA BANDYOPADHYAY, SWADES KUMAR CHAULYA, PANKAJ KUMAR MISHRA		26/Mar/2009	09725268.8	17/Feb/2016	2269088
4	0041NF2008/PL		LAKSHMI KANTA BANDYOPADHYAY, SWADES KUMAR CHAULYA, PANKAJ KUMAR MISHRA		26/Mar/2009	09725268.8	17/Feb/2016	2269088
5	0117NF2009/US	DEVICE FOR ROOF SUPPORT OF UNDERGROUND MINE/TUNNEL	SUDHIR KUMAR KASHYAP, AMALENDU SINHA		18/Oct/2012	13/579631	23/Feb/2016	9,267,375

# <u>2016 - 17</u>

### **<u>Granted in Foreign Countries</u>**

S. NO.	 TITLE		 COMP FILING DATE	APPLICATION NO.		PATENT NO.
1		SUDHIR KUMAR KASHYAP, AMALENDU SINHA	16/Aug/2012	2011216967	02/Feb/2017	2011216967

#### 2017-18

S. NO.	NFNO	TITLE		FILING		APPLICATION NO.		PATENT NO.
1		MONITORING SYSTEM FOR OPENCAST MINES	LAKSHMI KANTA BANDYOPADHYAY, SWADES KUMAR CHAULYA, PANKAJ KUMAR MISHRA		29/Mar/2010	1118285.4	19/Apr/2017	GB2481940

#### <u>2018-19</u>

**Granted in Foreign Countries: NIL** 

#### <u>2019-20</u>

Patent Granted in Foreign Countries: NIL

#### <u>2020-21</u>

**Granted in Foreign Countries:** NIL