

**B.S Abdur Rahman Crescent Institute of Science and Technology**

**Office of Center for Sustainable Development and  
Energy, Sponsored Project and Consultancy**

**Details of Sponsored Projects (Government and Non Government) during the period 2014 - DEC 2020**

S.no	Name of the Project/Title	Name of the Principal Investigator / Co Investigator	Department of Principal Investigator / Co Investigator	Name of Funding Agency	Type (Government/ Non-Government)	Date/ Year of Award	Funds Provided (In Lakhs)	Duration of the project
<b>Government Sponsored Sustainable Development Projects</b>								
1	Smart Textile with Antimicrobial and Water Repellent Properties for Coronavirus -International Project	Dr. S. Hemalatha & Dr. D. Mubarak Ali	Life Sciences	Kasetsart University, Department of Materials Engineering, Thailand	Government	15.10.2020	38.00	14 Months
2	Bio Incubator Grant (Bio Nest)	Dr. M. Parvez Alam (CEO) & Dr.S.Hemalatha (Dean)	CIIC & Life Sciences	Biotechnology Industry Reseach Assistance Council (BIRAC)	Government	06.06.2019	240.00*	3 Years
3	Continuous Ambient Air Quality Monitoring Station (CAAQMS)	Dr. Vasanthi Padmanabhan & Dr. A.K. Kaliluthin	Civil Engineering	Tamil Nadu Pollution Control Board (TNPCB)	Government	2019-20 (17.06.2020)	150.00***	3 Years
4	Supply, Erection, Installation, Commissioning, Operation and Maintenance of Co-Digestion plant for Organic Fraction of Leftover Food waste, Vegetable peels and Fruit peels for Biogas generation from Hotel industry on Turnkey basis - Biogas Plant	Dr. T. Harinarayana	CSD / ESPAC & CIVIL Engineering	CSIR-Central Leather Research Insititute funded by Department of Science and Technology (CLRI & DST)	Government	14.10.2019	35.00**	1 Year
5	Modernization of RF and Microwave Lab for Signal Quality Measurements in Sub 3GHz - Modernisation and Removal of Obsolescence (MODROB)	Dr. C. Tharini & Mr. A. Ramesh Kumar	Electronics and Communication Engineering	All India Council of Technical Education (AICTE)	Government	20.07.2020	20.00	3 Years
6	Modernization and upgradation of Structural Engineering Laboratory – Establishment of Non-Destructive Testing Facility for Concrete (MODROB)	Dr. Vasanthi Padmanabhan & Dr. J. Revathy	Civil Engineering	All India Council of Technical Education (AICTE)	Government	09.01.2020	10.00	3 Year
<b>Other Government Sponsored Projects</b>								
7	ATAL FDP on 3D Printing & Design	Dr. P.D.Jeyakumar and Dr. Arokia Julius	Mechanical Engineering	All India Council of Technical Education (AICTE)	Government	16.10.2020	0.93	3 Months
8	Be the change Teaching learning process - Short Term Training Program (STTP)	Dr. Nikhat Hamza	HR / Electronics and Communication Engineering	All India Council of Technical Education (AICTE)	Government	10.08.2020	3.25	3 Months
9	Artificial Intelligence and Deep Learning Techniques - Short Term Training Program (STTP)	Dr. G. Kavitha & Dr. P. Latchoumy	Information Technology	All India Council of Technical Education (AICTE)	Government	10.08.2020	3.00	3 Years
10	Seismic Performance of Light - Research Promotion Scheme	Dr. J.Revathy & Dr.P.Gajalakshmi	Civil Engineering	All India Council of Technical Education (AICTE)	Government	20.03.2020	2.00	1 Year
11	Bimetallic nanoparticles coated hybrid materials for effective photocatalytic degradation of hazardous dyes in effluent water	Dr. N. Vasimalai & M. Sandhiya Malathi K. Joyce	Chemistry	Tamil Nadu State Council for Science and Technology (TNSCST)	Government	18.03.2020	0.075	1 Year
12	Influence of Bacterial Species on the Durability Performance of Green Concrete for Sustainable Built Environment	Dr. R. Revathi & M. Abdulrahman	Civil Engineering	Tamil Nadu State Council for Science and Technology (TNSCST)	Government	18.03.2020	0.075	1 Year

13	Application of Bio medical waste for the development of sustainable concrete	Dr. P. Gajalakshmi & K.N. Krishnaprasad	Civil Engineering	Tamil Nadu State Council for Science and Technology (TNSCST)	Government	18.03.2020	0.075	3 Years
14	Skill and Personality Development Program Centre for SC/ST students (SPDC)	Dr. Prakash Natarajan, Dr R. Priyadarshini	Information Technology	All India Council of Technical Education (AICTE)	Government	03.03.2020	14.68	1 Year
15	Data Driven Techniques for Business Analytics using R Programming, Python and Tableau - Short Term Training Programme (STTP)	Dr. PANBOLI S	Management Studies	All India Council of Technical Education (AICTE)	Government	21.02.2020	2.00	3 Months
16	Disaster Mitigation : A shift from disaster management towards disaster preparedness - Short Term Training Program (STTP)	Dr. Vasanthi Padmanabhan & Dr. V.S.Priya	Civil Engineering	All India Council of Technical Education (AICTE)	Government	21.02.2020	3.00	3 Months
17	Internet of Things (Everything) - Future Short Term Training Program (STTP)	Dr. S. Revathi & Dr. V. Muthupriya,	Computer Science and Engineering / Computer Application	All India Council of Technical Education (AICTE)	Government	21.02.2020	2.00	2 Years
18	Copper smelters and its impact on the health of downstream people, the economic livelihood of its employees, and waste management system. the case of Sterlite Copper in Tuticorin, Tamil Nadu	Dr. Mohamed K	Management Studies	All India Council of Technical Education (AICTE)	Government	13.02.2020	4.38	1 Year
19	Yoga Module in Lung Inflammation and ALRI	Dr. S. Hemalatha & Mrs. Ranjani	Life Sciences	Department of Science and Technology (DST) - (SATHYAM)	Government	12.10.2020	15.00	1 Year
20	"Synthesis and Characterization of ZrO2 Dispersed Ti, Ti-6Al-4V, Ti-6Al-5V, Ti-6Al-7Nb composite"	Dr. Karunanithi	Aerospace Engineering	Science and Engineering Research Board (SERB)	Government	06.11.2019	18.30	3 Years
21	Deasign of Antennas for 5G Applications	Ms.Sivashanmuga Valli	ECE	Science and Engineering Research Board (SERB)	Government	16.12.2019	18.30	3 Years
22	Light induced process of Hierarchical electron cascade system, Materials and Devices for Solar energy conversion	Dr. Asha Jhonsi Mariadoss	Chemistry	Science and Engineering Research Board (SERB)	Government	12.03.2019	18.30	3 Years
23	Mechanistic anti-tumour activity of vernodaline isolated from centratherum anthelminticum on colorectal cancel cells	Dr. P. Ashok Kumar	Life Sciences	Science and Engineering Research Board (SERB)	Government	27.02.2019	18.30	3 Years
24	Cellular Automata Models for Propagation of Tsunami Waves	Dr. E.Syed Mohamed	CSE	Science and Engineering Research Board (SERB)	Government	09.08.2019	12.48	3 Years
25	Formulating antibiotic resistance breakers to control multidrug resistant pathogenic bacteria	Dr. S. Hemalatha & Mrs. Ranjai	Life Sciences	Department of Biotechnology (DBT)	Government	23.09.2019	30.34	3 Years
26	Triazole based New Functional Chromophores for optoelectronics and Biological Application	Dr. K. Karthikeyan	Chemistry	Tamil Nadu State Council for Science and Technology (TNSCST)	Government	04.11.2019	3.2	2 Years
27	An emprical Inverstigation of Minimum supoort price on Agriculture Commodities	Dr. Mohd. Amir & Dr. Afzalur Rahman	Commerce	Tamil Nadu State Council for Science and Technology (TNSCST)	Government	04.11.2019	1.80	1 Year
28	Automation of Climate Control inside a naturally ventilated polyhouse (GREEN HOUSE)	Dr. M. Parvez Alam (CEO) & Kannan Ganapathi	CIIC	Government of Tamilnadu, Entrepreneurship Development and Innovation Institute (TN-EDII)	Government	10.07.2019	10.00	1 Year
29	A smart intravenous dripper System for centralized monitoring and automatic control of intravenous fluid.	Dr. M. Parvez Alam (CEO) & Radhakrisnan Jothiram	CIIC	Government of Tamilnadu, Entrepreneurship Development and Innovation Institute (TN-EDII)	Government	10.07.2019	10.00	1 Year

30	Health and Sanitation of Wheels	Dr. M. Parvez Alam (CEO) & Mr. Ravi Senji	CIIC	Government of Tamilnadu, Entrepreneurship Development and Innovation Institute (TN-EDII)	Government	10.07.2019	2.15	1 Year
31	Wisdom water management system for Agriculture Sector	Dr. M. Parvez Alam (CEO) & Mohideen	CIIC	Government of Tamilnadu, Entrepreneurship Development and Innovation Institute (TN-EDII)	Government	21.09.2019	2.00	1 Year
32	Human Pancreatic Islet Transplantation to cure Diabetes in India	Dr. M. Parvez Alam (CEO) & Dr. Nithya Kalyani	CIIC	Government of Tamilnadu, Entrepreneurship Development and Innovation Institute (TN-EDII)	Government	16.12.2019	5.00	1 Year
33	Development of Hybrid Rocket Motor	PI – Dr.P.N.Kadiresh CO-PI – Sri Nithya Mahottmannada	Aerospace Engineering	Aeronautics Research & Development Board (AR&DB), (DRDO)	Government	2017-18	9.79	3 Years
34	Fault diagnosis on single stage helical planetary gearbox using machine learning algorithms	Aquib Yousuf, Aravind.V.K, Aravinda Krishnan.A, Farhanuddin.S.M. Syed Shaul Hameed	Mechanical Engineering	Tamilnadu State Council For Science And Technology (TNSCST)	Government	2018-19	0.08	1 Year
35	Phycoremediation of CO2 Level in sub urban area via CO2 Sequestration by native microalgae : an eco friendly approach	Dr D Mubarak Ali, M Santhosh Kumar A Aravindh	Life Sciences	Tamilnadu State Council For Science And Technology (TNSCST)	Government	2018-19	0.08	1 Year
36	Structural Behaviour of Corroding Prestressed Concrete Systems and Extension of Service Life using Cathodic Protection (In Collaboration with IIT, Madras)	Dr. M.S. Haji Sheik Mohammed (Co PI)	Civil	Science and Engineering Research Board (SERB)	Government	2017-18	49.50	3 Years
37	Antimicrobial Efficacy and Mechanisms of Whole Plant Extract of Acacia Arabica with Triphala on Biofilm Forming Cariogenic Microorganisms	Dr. Karthikeyan Ramalingam	Life Sciences	The Ministry of Ayurveda, Yoga & Naturopathy, Unani, Siddha, Sowa Rigpa and Homoeopathy (AYUSH-EMR)	Government	2017-18	33.00	3 Years
38	Synthesis of antimicrobial nanoemulsions for the treatment of multi drug resistant ESKAPE pathogens	Dr. Karthikeyan Ramalingam	Life Sciences	Science and Engineering Research Board (SERB)	Government	2017-18	23.28	3 Years
39	Development of hybrid nano based BLDC motor and validation of the design by using VLSI technology	Dr. K. Boopathy	EEE	Defence Research and Development organisation (DRDO)	Government	2017-18	9.79	2 Years
40	Corrosion protection and service life extension of reinforced concrete roofing systems in existing buildings	Ms.Roopaa	Civil	Science and Engineering Research Board (SERB)	Government	2017-18	18.30	3 Years
41	Endophytic diversity of herbal plant Hibiscus	Dr.Wasima. M	Life Sciences	Department of Biotechnology (DBT)	Government	2017-18	8.00	1 Year
42	Tamil Tholkappiam	Dr. Shriram	CSE	Tamil Virtual Academy (TVA)	Government	2017-18	2.50	1 Year
43	Tamil Plagiarism Checker	Dr. Shriram	CSE	Central Institute of Classical Tamil (CICT)	Government	2017-18	2.15	1 Year
44	A novel access to indolizidines and quinolizidine alkaloids through stereoselective N-tethered intramolecular cyclopropanation of pyridine	Dr. J. Elangovan	Chemistry	Department of Science and Technology (DST-SERB)	Government	2016-17	48.70	3 Years
45	Construction of optical logic gates using soliton collisions and study of electrical solitons in nonlinear transmission lines	Dr. M. Vijaya jayanthi	Physics	Science and Engineering Research Board (SERB)	Government	2016-17	32.44	3 Years
46	Development of Graphene and Metal Nanoparticles Reinforced Flexible Polymer nanocomposites for Effective Electromagnetic Interference (EMI) Shielding Applications	Dr. M. Basheer Ahamed	Physics	Science and Engineering Research Board (SERB)	Government	2016-17	28.01	3 Years

47	Immunosuppressive cells within inflammatory Tumor Microenvironment	Dr. Neesar Ahmed	Life Sciences	Science and Engineering Research Board (SERB)	Government	2016-17	25.00	3 Years
48	Antioxidant gene polymorphisms and ROS in cancer risk	Dr. Soumen Bera	Life Sciences	Department of Biotechnology (DBT)	Government	2016-17	24.75	3 Years
49	Seismic performance of exterior beam column joint using ferrocement jacket	Dr. J. Revathy	Civil	Tamilnadu State Council For Science And Technology (TNSCST)	Government	2016-17	0.10	1 Year
50	Application of nano particles in green concrete for sustainable built environment	Dr. J. Revathy	Civil	Tamilnadu State Council For Science And Technology (TNSCST)	Government	2016-17	0.10	1 Year
51	Development of Graphene SrTiO <sub>3</sub> based hybrid photocatalytic system for the production of solar fuels	Dr. Noor Aman Ahrar Mundari	Chemistry	Science and Engineering Research Board (SERB)	Government	2015-16	24.98	3 Years
52	Synthesis of Novel Low Band Gap Polymer Materials for Solar Cell Applications	Dr. Vajjiravel Murugesan	Chemistry	Science and Engineering Research Board (SERB)	Government	2015-16	23.78	3 Years
53	Investigation of multirate properties of rare earth and transition metal doped bismuth for functional applications	Dr. Shameem banu	Physics	Science and Engineering Research Board (SERB)	Government	2015-16	23.55	3 Years
54	Synthesis, characterization and optimization of QDs on TiO <sub>2</sub> surface for quantum dot solar cells	Dr. M. Asha Jhonsi	Chemistry	Science and Engineering Research Board (SERB)	Government	2015-16	19.76	3 Years
55	Identifying the molecular basis of peroxidase activity of Peroxiredoxin 6 - An approach for designing Antioxidant Peptides and Inhibitors	Dr. Md Khurshid Alam Khan	Life Sciences	Science and Engineering Research Board (SERB)	Government	2015-16	14.30	3 Years
56	Synthesis and characterization of multiferroite nano composite for functional applications	Dr. Shameem banu	Physics	Department of Science and Technology (DST)	Government	2015-16	14.19	3 Years
57	The effect of aluminum on TiAlN, CrAlN and ZrAlN coatings using RF powered Magnetron Sputtering	Dr. S. Beer Mohamed	Mechanical Engineering	University Grants Commission -DAE consortium for Scientific Research	Government	2015-16	8.21	3 Years
58	Seismic retrofitting of pre-stressed concrete beams externally bonded with fibre reinforced polymer composites	Dr. J. Revathy	Civil	Science and Engineering Research Board (SERB)	Government	2015-16	4.50	3 Years
59	gpX1 gene polymorphisms and mitochondrial ROS signaling in cancer risk	Dr. Soumen Bera	Life Sciences	Science and Engineering Research Board (SERB)	Government	2015-16	4.00	3 Years
60	Palladium catalysed Buchwald Hartwig coupling of 2-C hydroxymethyl D glycols and aryl halides : Synthesis of functionalized C - Aryl Glycosides	Dr. Bhagavathy	Chemistry	Department of Science and Technology (DST)	Government	2014-15	42.60	3 Years
61	Investigation of chaotic and strange nonchaotic phenomena in coupled nonlinear circuits and systems	Prof. I Raja Mohamed	Physics	Science and Engineering Research Board (SERB)	Government	2014-15	32.46	3 Years
62	Seismic performance of FRP confined concrete filled steel tubular columns	Dr. P. Gajalakshmi	Civil	Ministry of Earth Sciences (MOES)	Government	2014-15	29.10	3 Years
63	Preparation of rare-earth doped molybdate nanostructures using soft chemical route for opto electronic applications	Dr. J. Thirumalai	Physics	Science and Engineering Research Board (SERB)	Government	2014-15	23.64	3 Years
64	Development of Oil Absorbing Polymer Product for Efficient Removal of Oil Spills in Sea water	Dr. R. Vasanthakumari	Polymer Nanotechnology	Naval Research Board (NRB)	Government	2014-15	20.04	2 Years
65	Applications of Gold Catalysis For The Synthesis Of Bioactive Heterocyclic And Natural Product Mimic	Dr.K.Karthikeyan	Chemistry	Science and Engineering Research Board (SERB)	Government	2014-15	19.66	3 Years

66	Bismuth titanite quantum photo voltage application	Ms. Saai Harini	Chemistry	Department of Science and Technology (DST)	Government	2014-15	18.14	3 Years
67	To study the effect of diagnosis and ortholight on protein stability in renal disfunction	Dr. Shazia Jamal	Life Sciences	Science and Engineering Research Board (SERB)	Government	2014-15	13.60	3 Years
68	Wear behavior of duplex coated steels	Dr.R.Rajendran	Mechanical Engineering	University Grants Commission -DAE consortium for Scientific Research	Government	2014-15	5.37	2 Years

**TOTAL (Rs. In Lakhs)**

**1351.08**

\*Crescent Institution contribution 60 Lakhs  
\*\*Crescent Institution contribution Rs. 13.30 Lakhs  
\*\*\* Estimated

S.no	Name of the Project/Title	Name of the Principal Investigator / Co Investigator	Name of Funding Agency	Type (Government/ Non-Government)	Department of Principal Investigator / Co Investigator	Date/ Year of Award	Year in Range	Duration of the project
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**Non- Government Sponsored Sustainable Development Projects**

69	Mira crab STP-1m3 Capacity advanced japanese waste water technology	T. Harinarayana	M/s.Kankyo Cleantech (I) Pvt Ltd	Non Government	Mechanical	2017-18	20.00	3 Years
70	Vermi filter 1m3 capacity vermi operated STP	T. Harinarayana	M/s.Kankyo Cleantech (I) Pvt Ltd	Non Government	Mechanical	2017-18		3 Years
71	Biobox Biogas 50 kg capacity containarised bio gas technology.	T. Harinarayana	M/s.Kankyo Cleantech (I) Pvt Ltd	Non Government	Mechanical	2017-18		3 Years
72	Piro cracker 25 kg capacity plastic pirolysis unit	T. Harinarayana	M/s.Kankyo Cleantech (I) Pvt Ltd	Non Government	Mechanical	2017-18		3 Years
73	ROBOLAB-4.0 engineering students for educational and skill purpose	Dr. S. Rasool Mohideen	M/s.Prag Robotics Pvt Ltd	Non Government	Mechanical	2018-19	120.00	3 Years
74	Demo vehicle for mechanical / automobile engineering students for educational and demo purpose	Dr. Ashok Ghosh	M/s. Hyundai motor india foundation	Non Government	Automobile	2016-17	8.08	3 Years
75	Demo vehicle for mechanical / automobile engineering students for study and training purpose	Dr. Ashok Ghosh	M/s. Ford India Pvt. Ltd.	Non Government	Automobile	2018-19	14.97	Nil
76	Demo vehicle for mechanical engineering students for study and training purpose	Dr. S. Rasool Mohideen	M/s. Ford India Pvt. Ltd.	Non Government	Mechanical	2014-15	14.00	3 Years

**Other Non-Government Sponsored Projects**

77	Deep Learning Algorithm for Block Chain Verification System	Dr. Sharmila & Dr. W. Aisha Banu	UNWIND Learning Lab	Non Government	CSE	17.03.2020	7.00	1 Year
78	Prof. S. Peer Mohamed Endowment Fund	Mr. T. Velmurugan	Prof. S. Peer Mohamed Endowment Fund	Non Government	Physical Education	13.09.2019	1.27	1 Year
79	Dr. Raja Sir Muthiah Chettiar of Chettinad Endowment Fund	Mr. Hamanulla N	Dr. Raja Sir Muthiah of Chettinadu	Non Government	Physical Education	13.09.2019	0.30	1 Year

80	Training program on "Automotive Embedded System"	Dr.C.Tharini	M/s. Jasmin Infotech	Non Government	ECE	2018-19	40.00	1 Year
81	Prof. S. Peer Mohamed Endowment Fund	Mr. Hamanulla N	Prof. S. Peer Mohamed Endowment Fund	Non Government	Physical Education	2018-19	1.27	1 Year
82	Patient monitoring System for Scheizophrenia Research Foundation (SCARF) organization	Dr.C.Tharini	M/s.Jasmin Infotech	Non Government	ECE	2018-19	0.70	1 Year
83	Dr. Raja Sir Muthiah Chettiar of Chettinad Endowment Fund	Mr.T. Velmurugan	Dr. Raja Sir Muthiah of Chettinadu	Non Government	Physical Education	2017-18	0.3	1 Year
84	Development of 17 hp Tractor for Indian Environment	Dr. R. Rajendran	M/s. SAEINDIA Pvt. Ltd.	Non Government	Mech	2018-19	4.00	Nil
85	Velayutham mudaliar scheme Endowment Fund	Dr. Raja Prabu	Velayutham mudaliar scheme Endowment Fund	Non Government	EEE	2018-19	1.00	1 Year
86	Prof. S. Peer Mohamed Endowment Fund	Dr . R. Auvai	Prof. S. Peer Mohamed Endowment Fund	Non Government	Physical Education	2017-18	0.6	1 Year
87	Dr. Raja Sir Muthiah Chettiar of Chettinad Endowment Fund	Mr.T. Velmurugan	Dr. Raja Sir Muthiah of Chettinadu	Non Government	Physical Education	2017-18	0.3	1 Year
88	Dr. Raja Sir Muthiah Chettiar of Chettinad Endowment Fund	Dr . R. Auvai	Dr. Raja Sir Muthiah of Chettinadu	Non Government	Physical Education	2016-17	5.0	1 Year
89	Prof. S. Peer Mohamed Endowment Fund	Dr . R. Auvai	Prof. S. Peer Mohamed Endowment Fund	Non Government	Physical Education	2016-17	1.46	1 Year
90	Dr. Raja Sir Muthiah Chettiar of Chettinad Endowment Fund	Mr. Hamanulla N	Dr. Raja Sir Muthiah of Chettinadu	Non Government	Physical Education	2016-17	0.44	1 Year
91	Evaluation of sacrificial anode cathodic protection (SACP) system for reinforced concrete applications	Prof. Haji Sheik Mohammed	M/s.Radhe Structorepair Pvt Ltd.,	Non Government	Civil	2018-19	8.40	1.5 Years
92	Prof. S. Peer Mohamed Endowment Fund	Dr. K. M. Mehata	Prof. S. Peer Mohamed Endowment Fund	Non Government	CSE	2015-16	5.03	1 Year
93	Prof. S. Peer Mohamed Endowment Fund	Dr. K. M. Mehata	Prof. S. Peer Mohamed Endowment Fund	Non Government	CSE	2015-16	4.37	1 Year
94	Prof. S. Peer Mohamed Endowment Fund	Dr . R. Auvai	Prof. S. Peer Mohamed Endowment Fund	Non Government	Physical Education	2015-16	1.28	1 Year
95	Dr. Raja Sir Muthiah Chettiar of Chettinad Endowment Fund	Mr. Hamanulla N	Dr. Raja Sir Muthiah of Chettinadu	Non Government	Physical Education	2015-16	0.56	1 Year
96	Prof. S. Peer Mohamed Endowment Fund	Dr. K. M. Mehata	Prof. S. Peer Mohamed Endowment Fund	Non Government	CSE	2014-15	1.29	1 Year
97	Dr. Raja Sir Muthiah Chettiar of Chettinad Endowment Fund	Dr . R. Auvai	Dr. Raja Sir Muthiah of Chettinadu	Non Government	Physical Education	2014-15	0.42	1 Year
98	Prof. S. Peer Mohamed Endowment Fund	Dr. K. M. Mehata	Prof. S. Peer Mohamed Endowment Fund	Non Government	CSE	2014-15	4.37	1 Year
<b>TOTAL (Rs. In Lakhs)</b>							<b>266.41</b>	
<b>Government and Non Government Sponsored Projects GRANT TOTAL (Rs. in Lakhs)</b>							<b>1617.49</b>	