

PERFORMANCE INDICATORS  
FOR  
SCIENCE AND TECHNOLOGY

## 3.1 : Number of patents registered locally 2005-2013

Year	Resident	Non resident	Total
2005	64	116	180
2006	68	69	137
2007	54	37	91
2008	89	70	159
2009	111	254	365
2010	219	284	503
2007	54	37	91
2008	89	70	159
2009	111	254	365
2010	219	284	503
2011	195	227	422
2012	243	89	332
2013	326	165	491

Source : Adopted from information of the National Intellectual Property Office of Sri Lanka

## 3.2 : Number of patents registered by residents by sector 2011 - 2013

Category	2011	2012	2013
S&T institutes	3	13	6
Higher education institutes	8	0	4
Private institutes	11	11	18
Individuals	173	219	298
<b>Total</b>	<b>195</b>	<b>243</b>	<b>326</b>

Source : Adopted from information of the National Intellectual Property Office of Sri Lanka

### 3.3 : Distribution of Patents granted 2010-2013

Classification	Year			
	2010	2011	2012	2013
Agriculture related developments	8	25	39	44
Construction technology and materials developments	11	6	13	25
Drugs , cosmetics & other related product developments	12	14	21	33
Dryers/ dehydration technologies	2	1	2	2
Energy saving / generating devices	23	14	16	12
Food, beverage process technology and related technologies	12	25	21	22
Development of domestic appliances/utilities	25	17	29	45
IT, telecommunication, electronic and related	9	25	30	49
Packaging and packing materials	3	1	0	0
Process technology	7	5	20	26
Process technology related to Manufacturing sector	12	5	2	5
Rubber production and processing technologies	8	3	6	5
Chemicals productions and related technologies	6	8	2	8
Textile technology and related inventions	4	4	8	3
Automobile and related inventions	19	25	16	31
Other	19	17	18	16
<b>Total</b>	<b>180</b>	<b>195</b>	<b>243</b>	<b>326</b>

Source : Adopted from information of the National Intellectual Property Office of Sri Lanka

## 3.4 : Number of Innovation activities carried out by the government Institutions in 2013

Innovation Category (Number)	Government Sector			Higher Education		
	Devel- oped	Transferred	Commer- cialized	Developed	Transferred	Commer- cialized
New product	28	6	5	25	2	14
New processes	18	3	5	6	0	5
Existing products im- proved significantly	14	4	4	9	0	1
Existing process improved significantly	6	1	1	5	1	3
New plant varieties/ hybrids	16	9	7	0	0	0
Imported substitute	0	0	0	3	0	0
Design Prototypes	6	0	0	10	0	0

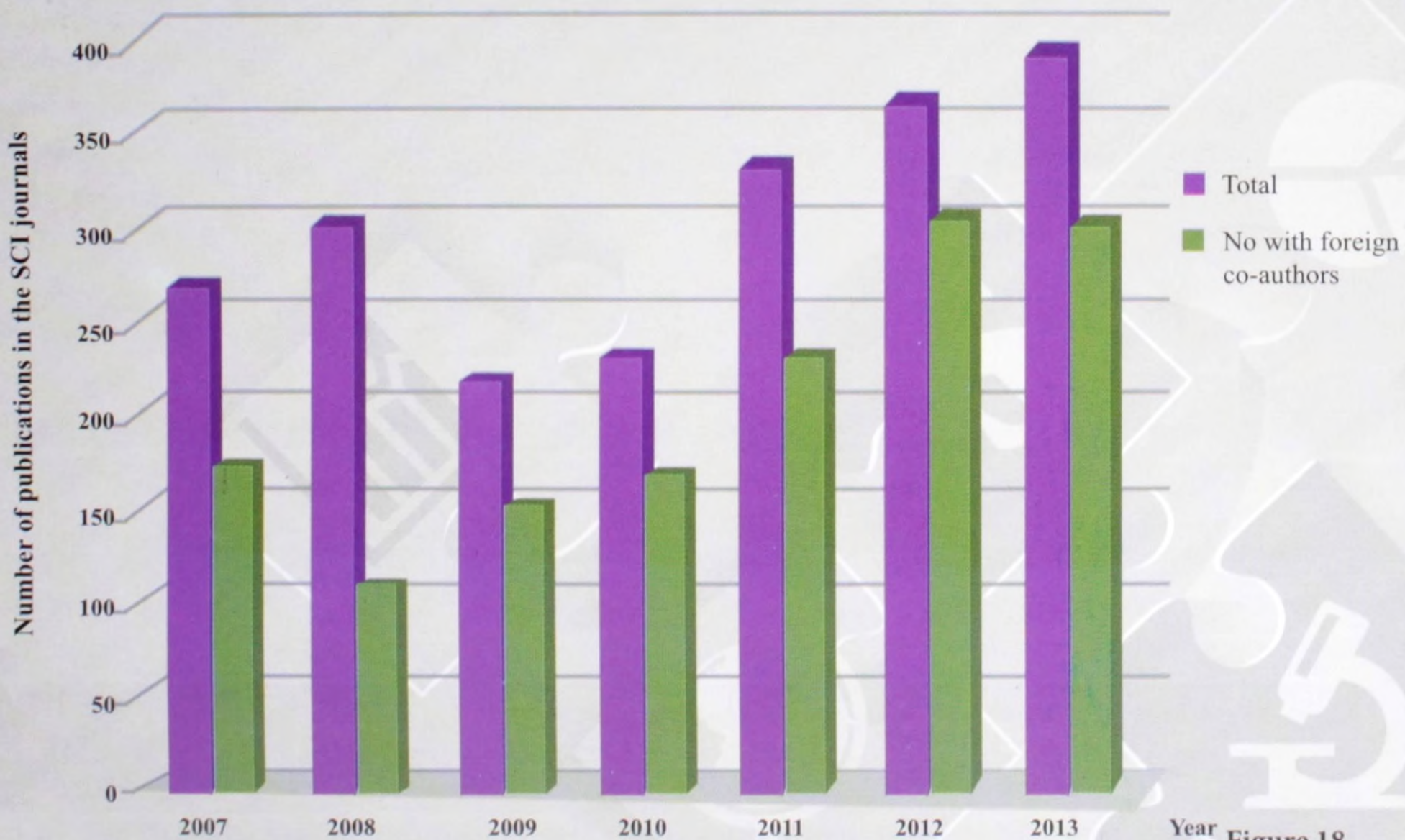
Source : National R&D Survey 2013 (NSF)

### 3.5 : Main fields of research publications by Sri Lankans in the SCI journals 2012 - 2013

Field	2012		2013	
	Total number	% With foreign co-authorship	Total number	% With foreign co-authorship
Agriculture	29	86.2	37	73.0
Biological science	20	90.0	20	85.0
Molecular biology & biotechnology	37	94.6	39	79.5
Chemical science	20	70.0	22	81.8
Earth Sciences	18	88.9	18	72.2
Engineering & Technologies	4	50.0	13	69.2
Environmental Science	27	81.5	36	88.9
fisheries, Aquaculture	2	100.0	6	100.0
food science	19	84.2	17	88.2
Forestry	19	100.0	12	100.0
Health science	114	80.7	122	72.1
Mathematics	2	50.0	5	80.0
Nanotechnology	32	90.6	14	92.9
Physics	11	54.5	17	47.1
Veterinary	6	100.0	2	100.0
Social Sciences	6	16.7	11	54.5
<b>Total</b>	<b>366</b>	<b>83.1</b>	<b>391</b>	<b>77.0</b>

Source : Adopted from the SCI database; SCI : Science Citation Index

## Publication trends in the SCI journals by Sri Lankan scientists 2004-2010



Year Figure 18

## Publication trends in different subject areas 2011-2013

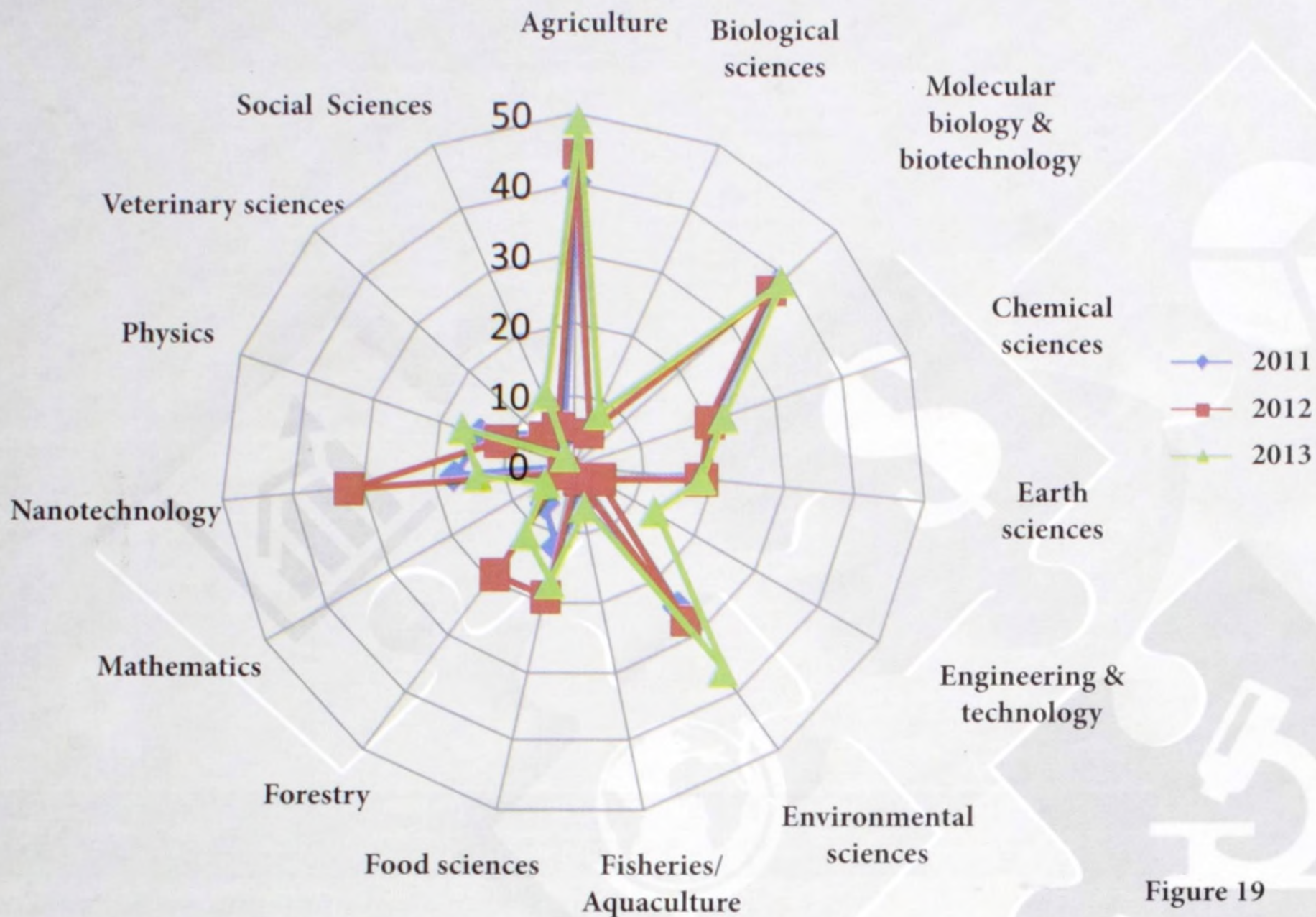


Figure 19

## 3.6 : Knowledge disseminations done during 2011-2013

Publication/ Activity	State Sector		Higher Education	
	National	International	National	International
Books and Book Chapters	46	8	855	269
Journal articles (Index)	74	89	2,960	2,880
Journal articles (other)	107	37	1,540	600
Newspaper articles	177	1	1,782	90
Abstracts	144	78	566	202
Newsletters, handbooks, manuals etc.	14,094	1	702	96
Presentations/ Resource Person seminars/conference	723	88	4,288	694

Source : National R&D survey 2013 (NSF)

### 3 7 : Sri Lanka S&T postgraduate output 2011 - 2013

Type	Year	Medical	Agriculture	Science/IT	Engineering	Total
PG Dip.	2011	303	01	177	16	497
	2012	164	00	140	09	313
	2013	310	11	156	02	479
MSc./MEng.	2011	62*	109*	310*	196*	677*
	2012	68	176	284	101	629
	2013	47	170	591	210	1,018
M.Phil.	2011	-	-	-	-	-
	2012	04	24	38	05	71
	2013	04	23	43	12	82
MS/MD	2011	00	00	00	00	00
	2012	00	00	00	00	00
	2013	251	00	00	00	251
Ph.D.	2011	256	04	06	09	275
	2012	229	07	08	04	248
	2013	02	07	16	02	27
<b>Total</b>	<b>2011</b>	<b>621</b>	<b>114</b>	<b>493</b>	<b>221</b>	<b>1,449</b>
	<b>2012</b>	<b>465</b>	<b>207</b>	<b>470</b>	<b>119</b>	<b>1,261</b>
	<b>2013</b>	<b>614</b>	<b>211</b>	<b>806</b>	<b>226</b>	<b>1,857</b>

Source : UGC Statistics 2013

## 3.8 : World Statistics of Researchers by Formal Qualification & Sex

Country	Year	Researchers					Research-ers -Fe-male (%)
		Total	PhD, or simi-lar level %	Bachelor or Master	short oc-cupancy programmes	All other qualifica-tions%	
Austria	2011	65,609	28.5	51.3	3	17.2	29
Belgium	2011	63,207	27.1	57.2	10.8	4.9	33.5
Bulgaria	2011	14,794	52.3	46.1	0.7	1	49.1
Chile	2010	9,453	41.7	52	0.7	5.6	32.4
China*	2011	612	66.8	30.9	0.3	2	37.7
Greece	2011	45,239	45.4	50	2.5	2.1	36.7
Iraq	2011	40,521	37.1	62.9	(n)	(n)	34.2
Malaysia	2011	73,752	45.1	33.5	15.7	1.8	48.7
Pakistan	2011	51,954	16.9	75.8	(n)	7.4	27.2
Russian Federation	2011	374,791	29.2	70.8	(n)	(n)	41.4
Singapore	2012	38,432	21.8	72	(n)	6.2	29.6
South Africa	2010	37,901	52.9	37.6	9.4	(n)	41.7
Sri Lanka	2010	5,162	26	69.2	(n)	4.8	36.9
Turkey	2011	137,452	42.3	55.1	1.5	1.1	35.6

Source: Adopted from UIS statistics

(n) Magnitude nil or negligible

\* Macao Special Administrative Region