

Recent Progress of Graphene Industrialization in China

Xiaoyue Xiao *

In the past 12 months, China has made a significant progress toward graphene industrialization that can be shown in the following two aspects:

1. Infrastructure:

- (1) In May 23 of 2014, Changzhou city government launched a special project up to \$30M to support carbon materials industrialization. Meanwhile, the government in collaboration with Ingenious Ene-Carbon Group has set up a \$300M Venture Capital fund ¹.
- (2) In September 3 of 2014, China Graphene Investment Alliance was established ².
- (3) In September 4 of 2014, "The Strategic New Materials Project" was launched in Fengtai, Beijing. This project is based on the collaboration with Brunel University ³.
- (4) In October 18 of 2014, Qingdao International Graphene Innovation Centre was opened ⁴.
- (5) In October 23 of 2014, the Ministry of Industry and Information Technology, National Development and Reform Commission, and Ministry of Finance have co-announced the new project: "Upgrading Project on Key Materials", in which it includes graphene ⁵.
- (6) China Innovation Alliance of the Graphene Industry - CGIA organized a very successful conference - International Graphene Innovation Conference - GRAPCHINA 2014. It attracted more than 1200 participants from the world ⁶.
- (7) In December 26 of 2014, Jining Graphene Industry Park was launched in Jining, Shandong province ⁷.

2. 2015 - The first year of graphene industrialization in China

As projected, graphene companies in China will expect sales of graphene powders and slurry up to 500 Millions RMB in 2015, which will mainly be applied to lithium battery, coating, composites, and touch screen technology etc.. Marketing needs will steadily increase to 100 Billions RMB in 2025.

Table 1. Some examples of projected sales in 2015

Company	Production Capacity (tons/year)	Expansion in 2015 (tons/year)	Projected Sales in 2015 (RMB/year)	Website
SuperC Technology Ltd.	1000 (slurry)		100,000,000	www.superc.com.cn
Ningbo Morsh Technology Co. Ltd.	300	1000	30,000,000	www.morsh.cn
Sixth Element Materials Technology Co. Ltd	100	500	40,000,000	www.thesixthelement.com.cn
Jining LeaderNano Tech L.L.C.	30	1000 (slurry)	100,000,000	www.leadernano.com
BTR New Energy Materials Inc.		100	10,000,000	www.btrchina.com
Xiamen Knano Graphene Technology Co. Ltd.	100		30,000,000	www.knano.com.cn

In another hand, 2D Carbon (Changzhou) Tech CO. Ltd has owned 30,000 M²/year production capability of graphene thin film, while Chongqing MoxiGroup has built a production line of 10 million x 15"/year for graphene thin films. This thin film product will be used for capacitive touch screen technology and so on.

¹ <http://www.chinanews.com/df/2014/05-23/6207193.shtml>

² <http://www.c-gia.org/index.php?m=content&c=index&a=show&catid=90&id=591>

³ http://cnews.chinadaily.com.cn/2014-09/04/content_18548642.htm

⁴ http://news.bandao.cn/news_html/201410/20141020/news_20141020_2464129.shtml

⁵ http://www.bjbusiness.com.cn/site1/bjsb/html/2014-12/15/content_280356.htm?div=-1

⁶ <http://www.c-gia.org/index.php?m=content&c=index&a=show&catid=20&id=514>

⁷ http://digitalpaper.stdaily.com/http_www.kjrb.com/kjrb/html/2015-01/16/content_290032.htm?div=-1

* Xiaoyue Xiao, Ph.D., Chair, GRAPCHINA 2015 (www.grapchina.com)
Director, International Business Cooperation Committee
China Innovation Alliance of the Graphene Industry; (<http://www.c-gia.org/>)
Phone: 025-58280597; Fax: 025-58280594; E-mail: sxiao@syfsci.com