

INTRODUCTION OF JSTI GROUP and TRI

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Deputy Director of TRI
JSTI GROUP

May 22th, 2017 Denver





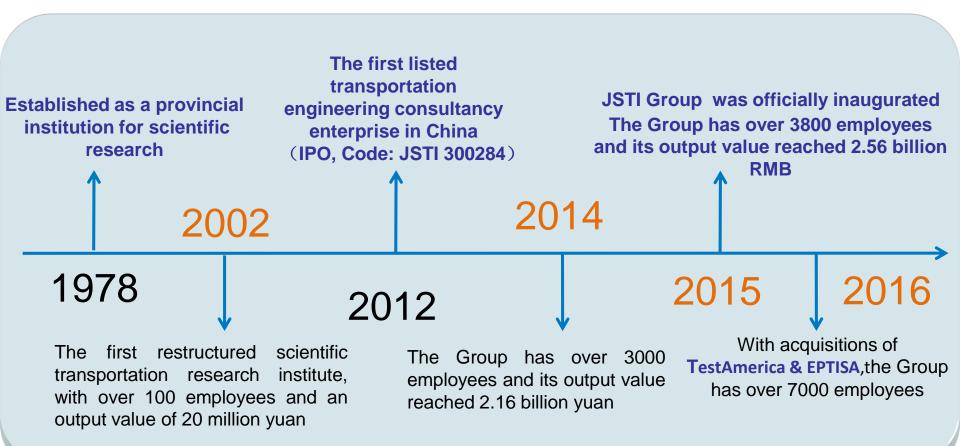


Contents

- Introduction of JSTI GROUP
- Introduction of Transportation Research Institute
- Technical Ability and Test Capability
- International Communication & Cooperation











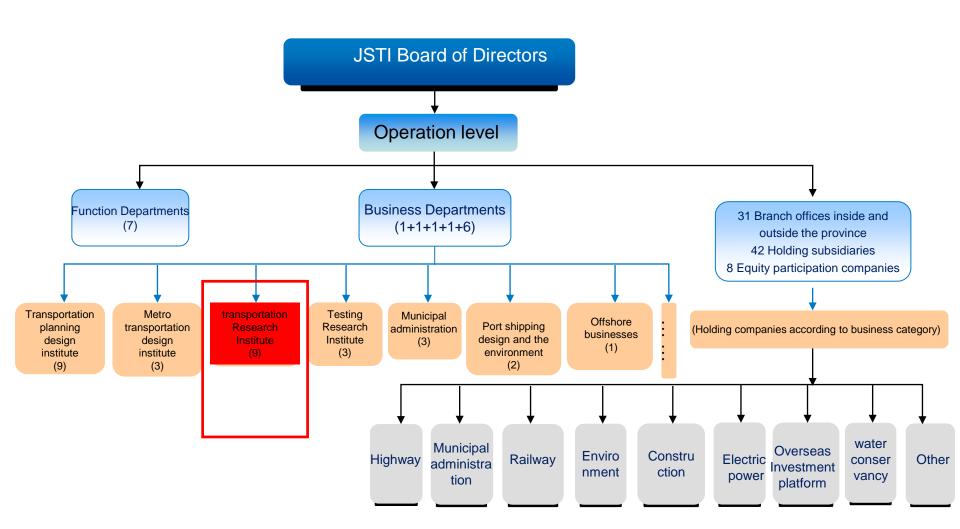
With its scope of operation covering industries such as of highways, municipal administration, irrigation, railways, rail transit, environment. aviation, construction and electric power. JSTI has developed into a conglomerate with survey and design, scientific research, testing and new materials, and R&D for new technologies at its core.



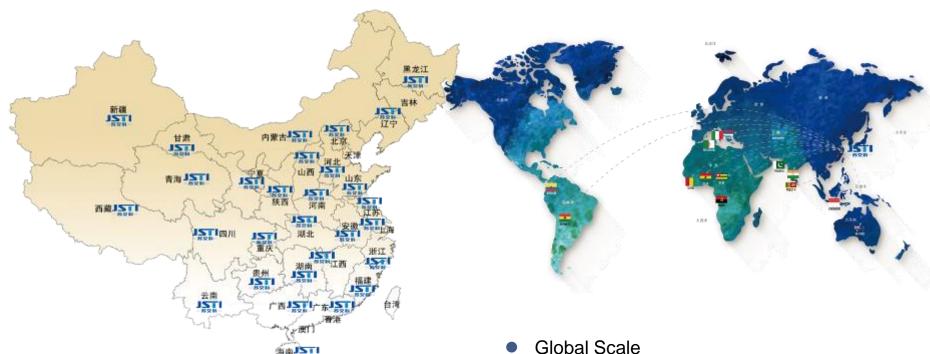
Global Infrastructure Consulting Service Provider











- **National Scale**
- JSTI operations have covered all 31 provinces, autonomous regions and municipalities in the country except Hong Kong, Macau and Taiwan

- Business has been extended to such countries and regions as Africa, Southeast Asia, America, East Europe, Australia, Italy, and Pakistan, etc.
- Based on the overall development trend of internationalization
- One of the first Chinese engineering design and consultancy enterprises that went global

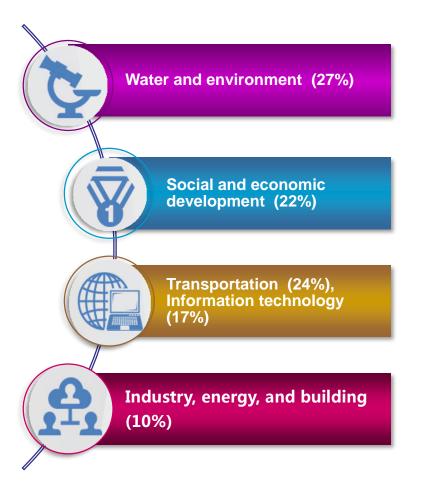




US Largest environmental monitoring service provider-TestAmerica



World leading engineering design consulting service provider-Spain EPTISA







- Appraised by America's ENR as among the "Top 60 Chinese Survey Planning Enterprises" for 12 consecutive years (ranking 14th place in 2016).
- JSTI ranked 108th and 98th among the "Global Top 150 Engineering Design Companies" by America's ENR in 2014-2016.





In the annual rankings of the "Top 60 Chinese Survey Planning Enterprises" for 2005-2016

Rank:41 Rank:37 Rank:36 Rank:22 Rank:18 Rank:14

2005... 2010 2012 2014 2015 2016

Rank:131 Rank:108 Rank:98

In the annual rankings of the "Global Top 150 Engineering Design Companies" for 2014-2016



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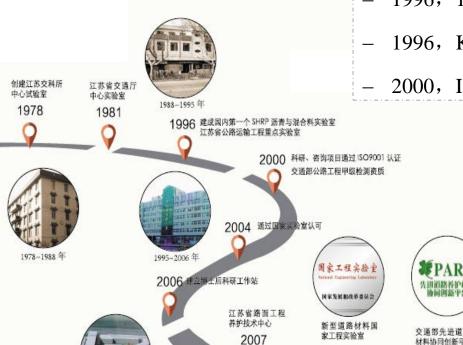


- 1978, Founded as central lab of Jiangsu Transportation Research Institute
- 1981, Central Lab of JSDOT
- 1996, 1st SHRP Lab in China
- 1996, Key Lab of Transportation Research of JS Province
- 2000, ISO9001 Certification

材料协同创新平台

2013

2012



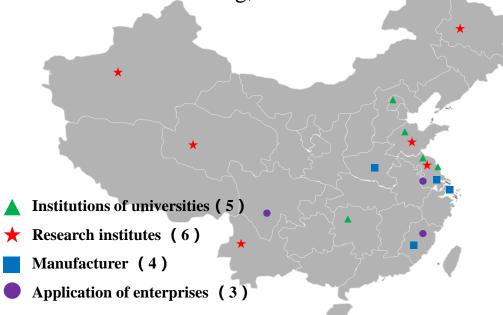
- 2000, Class's A Qualification
- 2006, Post Doctor Station
- 2007. Payement Maintenance Center of JS
- 2012, National Lab of Advanced Road **Material** (NLARM)
- 2013, Collaborative Platform for **Advanced Road Materials (CPARM)**





■ National Lab of Advanced Road Material (NLARM)

- ➤ Awarded by NDRC and MOT
- ➤ China's unique national road material R&D platform
- > Research on the application of new road materials
- ➤ Product equipment development research
- ➤ New material design verification and standard research
- ➤ New materials technology promotion and technical services
- Personnel training, international ex re and cooperation







MOT Collaborative platform for advanced road materials

Academy, Industry, and

Consultant, with collaboration for innovation







Mr. YU Jia

Chief Engineer

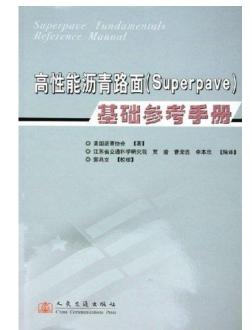
Famous expert of asphalt pavement,

Former Chairman
of International
Society of
Asphalt
Pavement(ISAP)











中华人民共和国交通运输部 发布







Dr. Rongji Cao

Professor,
Vice President of JSTI
International rubber
asphalt ambassador



Dr. Chen Ling

Director of JSTRI
Professor level senior
engineer, Famous
expert of asphalt
pavement



Senior Engineer, RCE,
Deputy Dean of JSTRI,
Pavement
maintenance and
management Expert









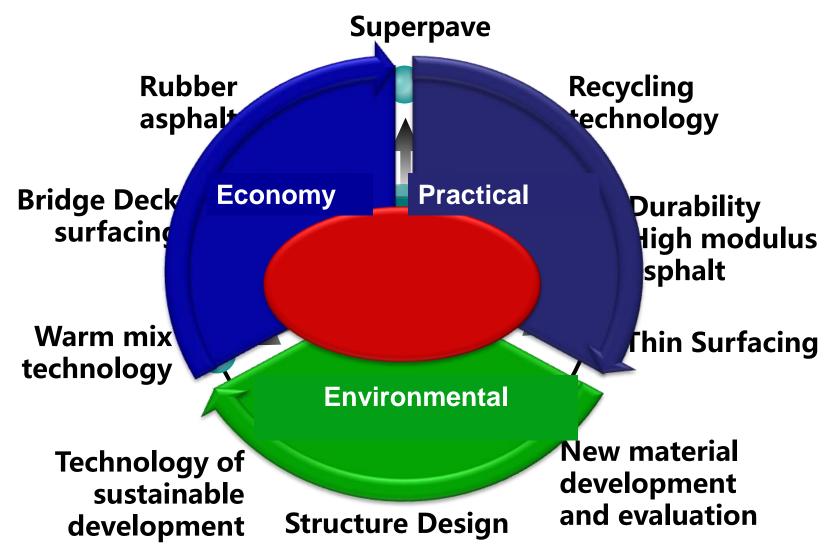
Awards	Year	Winning Projects
Jiangsu Province outstanding engineering consulting achievement award first prize	2007 2008 2015	Study on Construction Technical Specifications of Expressway Asphalt Pavement in Jiangsu Province Study on the Application of Rubber Asphalt in Expressway Long - term observation of service performance of research section of asphalt pavement of expressway in Jiangsu province
China Highway Society Science and Technology Award	2009 2010 2012	Study on Management and Key Technology of Extension Project of Jiangsu Section of Huning Expressway Research on Technology Integration of Superpave Study on Key Technology of Long - span Steel Deck Pavement Maintenance
Scientific Research Outstanding Achievement Award (S&T) - Technology Invention Award first prize	2014	Key Technology and Equipment for High Efficiency Recycling of Highway Asphalt Pavement
Guizhou Provincial Highway Institute Award	2016	Study on Preventive Maintenance System of Main Road Surface in Guizhou Province



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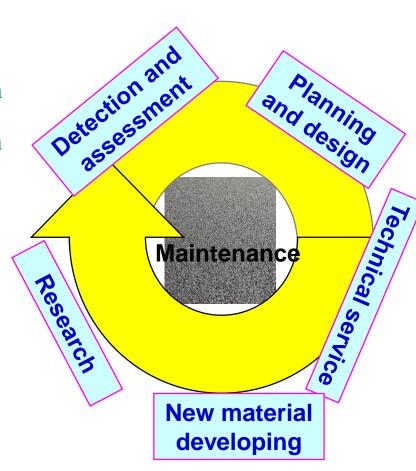




➤ Main Service—Full life cycle service for road construction

and preservation

- **■** Technical Consultation for road construction
- Pavement Preservation Technology Research
- Pavement testing and evaluation
- **Forensic Study**
- **■** Maintenance and Rehabilitation Design
- Technical support during implementation
- New material R&D and Industrialization





Development and Application of New Road Materials

High performance and high modulus asphalt

High viscosity and high elastic

asphalt

Waterborne epoxy asphalt

Novasurfacing

High-performance cold feed

Poly phosphoric acid modified high performance material

Trackless tack coat

Environmental conservation oriented

Low - volume mixing plant heat regeneration Warm mix rubber asphalt

High - volume mixing plant heat regeneration

High stability temperature method of rubber

asphalt

Medium temperature mixing technology

Security oriented

Self-cleaning drainage asphalt pavement

Degradation of vehicle exhaust

pavement

Multifunctional cool pavement

Large Clearance Noise Reduction

Asphalt Pavement

High elastic rubber noise reduction

pavement

Resin quick curing material





■ National Lab of Advanced Road Material (NLARM)

The largest pavement research laboratory in China

Functional area	Α	В	С	D	Total
Area (m ²)	2224.6	810	603.3	602.7	4240.6







Advanced instrument and equipment

- 1st Full SHRP Apparatus (The first set of equipment in China)
- 1st Gyratory Compactor (The first set of equipment in China)
- NAT
- Full set of French Mix Design Equipment
- UTM100

















MLS





□ Pavement Investigation Equipment

The most complete equipment in China















Longitudinal force coefficient vehicle







• TEST EQUIPMENTS OF EMULSION

- Emulsified asphalt colloid mill, lab and pilot equipment
- Laser particle size analyzer
- DSR
- BBR
- Brookfield viscometer
-

















• AMRL Comparison Test

- AMRL Proficiency Sample Program
 - ➤ Performance Graded of Asphalt Binder
 - ➤ Gyratory tests
 - ➤ Coarse Aggregate test
 - Emulsified asphalt test samples from 2016
 - Evaporated Residue
 - Distilled Residue
 - Saybolt Viscosity



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- The Federal Highway Administration--FHWA (U.S)
- Western Research Institute (U.S)
- Applied Research Association-ARA (U.S)
- FP2、NCCP、NCAT、LSU、TTI、ISSA
- IFSTAR (Past LCPC) (France)
- Transport Research Laboratory-TRL (UK)
- Bundesanstalt Fur Strassenwesen—BAST(Germany)
- National de Controle Technique des travaux Publics--CTTP(Algeria)
- Kazakhstan transportation research institute .JSC—KazdoNII (Kazakhstan)



FHWA



WRI



IFSTAR (LCPC)



CTTP



BAST



KazdoNII JSC









Rubber Asphalt 2009 Conference



ISAP Symposium 2012



LCA Symposium 2015

2016 Conference on Superpave





序号	Project Source	Project Name	Time
1	Kazakhstan	Kazakhstan TKU&UD highway reconstruction project center laboratory	2016-
2	China CITIC - China Railway Construction Consortium Project	Algeria East-West high-speed technical advisory services and in France and the United States comparative analysis of asphalt mixture design system	2009.7- 2012.12
3	Ministry of Science and Technology International Science and Technology Cooperation Project	Research on establishment and application of key technology system of asphalt pavement in African Countries	
4	CREEGC	Assistance to Pakistan national highway network repair (N5, N55) project pavement structure gradation optimization design consultation	









2017 National Conference on Pavement Maintenance and Preservation of China & 10th (2017) ISSA China Workshop June 8-9, 2017 Xuzhou, China





Improve Preservation

Quality and Best Practice

Latest Research, Best Practice and Live demonstration

June 8-9th,2017

Xuzhou, China http://slurry.org/









