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**Author:** Zheng, Tingting  
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# Curriculum Vitae

Tingting Zheng was born on 30<sup>th</sup> November 1982 in Fuzhou City, Fujian Province, China. She entered College of Chemistry, Beijing Normal University as top one of her senior high school in 2002. She obtained teacher qualification certification in 2006. In the same year, she accomplished her research in ‘Chemistry education in middle school’, and received her BSc degree under supervision of Prof. Dr. Lei Wang. She continued her study at the Key Laboratory of Radiopharmaceuticals, Ministry of Education, College of Chemistry, Beijing Normal University, under supervising of Prof. Bo-Li Liu and Dr. Hongmei Jia. Her research focused on overcoming the blood brain barrier for in vivo drug delivery. She received her MSc degree in 2009 with and the thesis was entitled ‘Improved brain uptake of 99m Technetium labeled radiopharmaceutical for SPECT imaging’. In the same year, she was awarded a research scholarship from the ‘Chinese Scholarship Council’. With this scholarship, she joined the Soft Matter Chemistry group at the Leiden institute of Chemistry, Leiden University, under supervision of Dr. Alexander Kros as a Ph.D candidate. Her research is described in this thesis. Since 1<sup>st</sup> January 2014, she is a postdoc in the Physical Chemistry and Colloid Science group at Wageningen University, under the supervision of Dr. Joris Sprakel and Dr. Renko de Vries.



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# List of Publications

## In this thesis:

- ❖ **Zheng, T. T.**; Voskuhl, J.; Versluis, F.; Zope, H. R.; Tomatsu, I.; Marsden, H. R.; Kros, A., Controlling the rate of coiled coil driven membrane fusion. *Chemical Communications* **2013**, 49 (35), 3649-3651.
- ❖ Marsden, H. R.; **Zheng, T. T.**; Voskuhl, J.; Kros, A., Controlled liposome fusion mediated by SNARE protein mimics. *Biomaterials Science* **2013**, 1 (10), 1046-1054.
- ❖ **Zheng, T. T.**; Boyle A.; Marsden, H. R.; Raap, J.; Valdink, D.; Martelli, G.; Kros, A., Probing coiled-coil assembly by paramagnetic NMR spectroscopy. *Organic & biomolecular chemistry*. **2014**, Accepted.
- ❖ **Zheng, T. T.**; Bulacu, M.; Boyle, A.; Versluis, F.; Marsden, H. R.; Valdink, D.; Martelli, G.; Raap, J.; Sevink, A.; Kros, A., An antiparallel tetrameric coiled coil. Manuscript in preparation.
- ❖ **Zheng, T. T.**; Boyle, A.; Marsden, H. R.; Kros, A., Increasing the membrane fusion efficiency by reducing undesired peptide-peptide interactions. Manuscript in preparation.

## Other publications:

- ❖ Tomatsu, I.; Marsden, H. R.; Rabe, M.; Versluis, F.; **Zheng, T. T.**; Zope, H.; Kros, A., Influence of pegylation on peptide-mediated liposome fusion. *Journal of Materials Chemistry* **2011**, 21 (47), 18927-18933.
- ❖ van Son, M.; **Zheng, T. T.**; Kumar, P.; Valdink, D.; Raap, J.; Kros, A.; Huber, M., Towards Artificial Membrane Fusion: Ek-Peptides, the Coiled-Coil Zipper. *Biophysical Journal* **2014**, 106 (2), 506A-506A.
- ❖ Marsden, H. R.; **Zheng, T. T.**; Kros, A., Controlled liposome fusion mediated by SNARE protein mimics. *Abstracts of Papers of the American Chemical Society* **2013**, 245.
- ❖ **Zheng, T.**; Zhou, H.; Chen, R.; Li, Z.; Xie, Y.; Jia, H., Improved brain uptake of <sup>99m</sup>TcN-NOET loaded by targeted sterically stabilized liposomes in ICR mice. *Journal of Labelled Compounds & Radiopharmaceuticals* **2009**, 52, S80-S80.

## Patent:

- ❖ **Zheng, T.**; Jia, H.; Xie, Y.; Zhou, H.; a novel <sup>99m</sup>Tc-labeled radiopharmaceutical for SPECT brain tumor imaging. *State intellectual property office of P.R.C.*, **2009**, No. 200910141973.6.



## 致谢最爱我和我最爱的人

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在着兰求学的这些年，因为工作的压力，五年间只回过家一次。然而，你们却没有一丝责怪，反而每次视频都督促我要好好工作，认真抓紧完成论文。所以，作为父家母家第一本英文出版物，这本书也包含了你们的功劳。

在成长的过程中，我从母亲那儿学会了思考方式，又从父亲那儿学会了坚持与毅力，使我大大受用于这本书的创作过程。

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因为对母亲的崇拜，在本科时期我选择了北京师范大学的化学教育专业。出于对父亲所从事的医学专业的好奇，硕士期间我选择了化学学院的放射性药物专业。于是我接触到了作为药物载体的脂质体。

正是因为抱着对脂质体载药及大的兴趣，我开始了本书对于脂质体膜融合的研究。本书不仅仅记载了我的科研成果，更包含了你们的支持与关爱。

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郑婷婷

二零一四年，十二月，二十一日

写于瓦格宁根

