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Biochemical and structural insights in bacterial B-type vitamin transporters of the Pnu family

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**Biochemical and structural insights in
bacterial B-type vitamin transporters of the
Pnu family**

Rajkumar Singh

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Cover image: The thesis cover shows embedded membrane proteins of Pnu family PnuT, PnuX and PnuC in green, blue and pink respectively. These proteins transport their respective substrates as shown in the image.

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PhD thesis

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the decision by the College of Deans.

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Monday 6 January 2020 at 16.15 hours

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To my grand parents and family.

TABLE OF CONTENTS

Chapter 1

Introduction	9
--------------	---

Chapter 2

PnuT uses a facilitated diffusion mechanism for thiamine uptake	41
---	----

Chapter 3

Crystallization screening of thiamin transporter-PnuT protein	61
---	----

Chapter 4

Structural and functional characterization of NadR from <i>Lactococcus lactis</i>	77
--	----

Chapter 5

A possible link between full length Pnu, SemiSWEET and SWEET transporters with preliminary study of Semi Pnu transporters	103
--	-----

Chapter 6

Cryo-electron microscopic structure of SecA protein bound to the 70S ribosome	143
--	-----

Summary	171
---------	-----

Samenvatting	173
--------------	-----

Acknowledgements	176
------------------	-----