I sincerely dedicate this thesis to
Maa, Papa and Wadood.

DECLARATION BY THE CANDIDATE

I do hereby declare that the thesis entitled **"Identification and characterization of an anti-platelet protein from *Daboia russelii* venom and understanding its molecular mechanism"** submitted to the School of Sciences, Tezpur University in part fulfilment for the award of the degree of **Doctor of Philosophy** in Department of Molecular Biology and Biotechnology, is a record of original research work carried out by me. Further, I declare that no part of this thesis has been reproduced elsewhere for award of any other degree.

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All help received by her from various sources have been duly acknowledged. No part of this thesis has been reproduced elsewhere for award of any other degree.

Date: **(Robin Doley)**

Place: Tezpur

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(Rafika Yasmin)

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List of abbreviations

%	Percentage
µ	Micron
µg	Micro gram
µl	Micro litre
µM	Micro molar
ºC	Degree celcius
3FTx	Three finger toxin
Å	Angstrom
AA	Arachidonic acid
ACE	Angiotensis-converting enzyme
AD50	Aggregation dose 50
ADP	Adenosine diphosphate
APS	Ammonium persulfate
APTT	Activated partial thromboplastin time
AU	Absorbance unit
BCIP	5-Bromo-4-chloro-3-indolyl phosphate
BPF	Bradykinin potentiating factor
BSA	Bovine serum albumin
$CaCl_2$	Calcium chloride
CNBr	Cyanogen bromide
Col	Collagen
CRISP	Cystein rich secretory proteins
CVD	Cardiovascular disease
Da	Dalton
Dab	Daboxin P
Dis	Disintegrin
DTNB	5,5'-dithio-bis-(2-nitrobenzoic acid)
DTT	Dithiotreitol
g	Gravitational force
GBD	Global burden of disease
GFC	Gel filtration chromatography

GP	Glycoprotein
GPC	Glutaminyl-peptide cyclotransferase
GPCR	G-protein coupled receptor
HCl	Hydrogen chloride
hr	Hour
kDa	Kilo dalton
KSPI	Kunitz-type serine protease inhibitor
LAAO	L-amino acid oxidase
LC-MS/MS	Liquid chromatography-mass spectrometry/mass spectrometry
M	Molar
mA	Milli ampere
mAU	Milli absorption unit
mg	Milligram
MeCN	Acetonitrile
min	Minute
ml	Millilitre
mM	Milli molar
NaCl	Sodium chloride
$NaHCO_3$	Sodium bicarbonate
NBT	Nitro blue tetrazolium
NCBI	National Centre for Biotechnology Information
NCT	Normal clotting time
NH_4HCO_3	Ammonium bicarbonate
nM	Nano molar
NP	Natriuretic peptide
OD	Optical density
PAGE	Polyacrylamide gel electrophoresis
PAR	Protease activated receptor
p-BPB	P-bromophenacyl bromide
PBS	Phosphate buffered saline
pH	Power/Potential of Hydrogen
PLA_2	Phospholipase A_2
PM	Peptidomimetic

PMA	Phorbol 12-myristate 13-acetate
p-NA	P-Nitroaniline
PPP	Platelet poor plasma
PRP	Platelet rich plasma
PT	Prothrombin time
RBC	Red blood cells
RP-HPLC	Reverse-phase high pressure liquid chromatography
RT	Recalcification time
RVV	Russell's viper venom
s	Second
SD	Standard deviation
SDS-PAGE	Sodium dodecyl sulphate- polyacrylamide gel electrophoresis
sec	Second
Snaclec	Snake C-type lectin
sPLA2	Secretory phospholipase A2
SVMP	Snake venom metalloprotease
SVSP	Snake venom serine protease
TCA	Trichloroacetic acid
TEMED	Tetramethyl ethylenediamine
TFA	Trifluoroacetic acid
Thr	Thrombin
TXA_2	Thromboxane A_2
U	Enzyme unit
V	Volt
VEGF	Vascular endothelial growth factor
VNGF	Venom nerve growth factor
vWF	Von willebrand factor
z	Charge