$$\left(\begin{array}{cccc|cccc}
-\eta\nabla^2 & 0 & 0 & \frac{\partial}{\partial x_1} & 1_{N\times 1} & 0 & 0 & 0 \\
0 & -\eta\nabla^2 & 0 & \frac{\partial}{\partial x_2} & 0 & 1_{N\times 1} & 0 & 0 \\
0 & 0 & -\eta\nabla^2 & \frac{\partial}{\partial x_3} & 0 & 0 & 1_{N\times 1} & 0 \\
\frac{\partial}{\partial x_1} & \frac{\partial}{\partial x_2} & \frac{\partial}{\partial x_3} & 0 & 0 & 0 & 0 & 1_{N\times 1} \\
\hline
1_{1\times N} & 0 & 0 & 0 & \multicolumn{4}{c}{\multirow{4}{*}{$0_{4\times 4}$}} \\
0 & 1_{1\times N} & 0 & 0 & & & & \\
0 & 0 & 1_{1\times N} & 0 & & & & \\
0 & 0 & 0 & 1_{1\times N} & & & &
\end{array}\right)
\left(\begin{array}{c}
u_1 \\ u_2 \\ u_3 \\ p \\ \hline c_1 \\ c_2 \\ c_3 \\ c_4
\end{array}\right)
= \frac{RaT}{\sqrt{x_1^2+x_2^2+x_3^2}}
\left(\begin{array}{c}
x_1 \\ x_2 \\ x_3 \\ 0 \\ \hline \int_\Omega u_1 \partial\Omega \\ \int_\Omega u_2 \partial\Omega \\ \int_\Omega u_3 \partial\Omega \\ \int_\Omega p \partial\Omega
\end{array}\right). \tag{15}$$